

*G. N. Jenkins*

ARCTIC REVIEW COMMITTEE

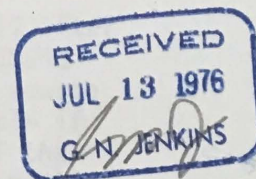
MINUTES OF MEETING OF JULY 5, 1976

MEMBERS PRESENT:

G.N. Jenkins, Chairman  
G.K. Humphreys (for C.E. Overturf)  
L.C. Sevic  
G.H. Thomson  
B.T. Reilly

GUESTS:

R. Horsfield  
M. Walsh  
J.A. Stewart  
A. Dedesko



TAGLU CONDENSATE PLANT

Mr. A. Dedesko reviewed the Taglu Condensate Plant study which supersedes the study done in 1974.

The Committee requested that further examination be done to determine possible better business opportunities for the disposition of raw condensate or products from a full scale or smaller plant, or a plant without the sulfolane extraction process.

It was suggested the possible disposition of raw condensate could be:

- sell to Northern Canada Power Commission at Inuvik after 1982 to meet their increasing energy requirements,
- supply by pipeline to power some of the gas line compressor and refrigeration stations,
- sell to Gulf who could inject it into their oil pool at Parsons Lake.

Because of the high cost of the sulfolane extraction process that removes the aromatics, it was agreed that more information is required on the quality of diesel and turbo B from the distillation tower. Possible sale of these products could be:

- turbo B by pipeline to power some of the gas line compressor and refrigeration stations,
- possible markets for low cetane diesel.



Before an investment decision is made, a product pricing commitment is required from the Department of Indian and Northern Development.

NORMAN WELLS INVESTMENT STRATEGY STUDY

Mr. A. Dedesko reviewed the Norman Wells Investment Strategy study.

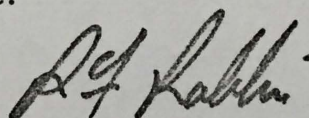
The Committee recommended that rather than wait until after the gas pipeline permit is granted, Imperial should approach CAGSL regarding supply of Norman Wells heavy fuel oil as the energy source for the gas pipeline compressor station. It would be preferable if the station is located close to Norman Wells to reduce cost of the heavy fuel oil pipeline. An alternate would be to have NCPC or CAGSL build a heavy fuel oil fired electrical generating plant at Norman Wells with transmission line to the station.

The Committee suggested that the study be extended to determine incentives for optimum utilization of the Norman Wells resource, i.e.,

- minimize heavy fuel oil or natural gas flaring,
- minimize naphtha injected to formation,
- increase crude production as has recently been suggested to be a practical consideration and refinery expansion.

After the economic and political considerations are evaluated, it may be necessary to meet with DIAND and make whatever changes may be needed to the 1944 Agreement or consider other alternatives.

Copies of the vugraphs presented are attached for the members and are available to others upon request.



R.F. ROBLIN  
Secretary

RFR/lcl  
July 9, 1976

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cc: G.N. Jenkins ✓	G.H. Thomson	D.M. Penrose	G.K. Whynot
C.E. Overturf	B.T. Reilly	R.O. Pfister	A. Dedesko
H.B. McGonigal	G.W. Carter	V. Sirois	G.K. Humphreys
L.C. Sevick	G.A. Fullerton	W.K. Tanner	J.A. Stewart
G.L. Haight	R. Horsfield	J.C. Underhill	
P.J. Levins	C.E. Langston	W.A. West	



TAGLU CONDENSATE PLANT  
AND  
NORMAN WELLS INVESTMENT STRATEGY STUDY

PURPOSE OF PRESENTATIONS

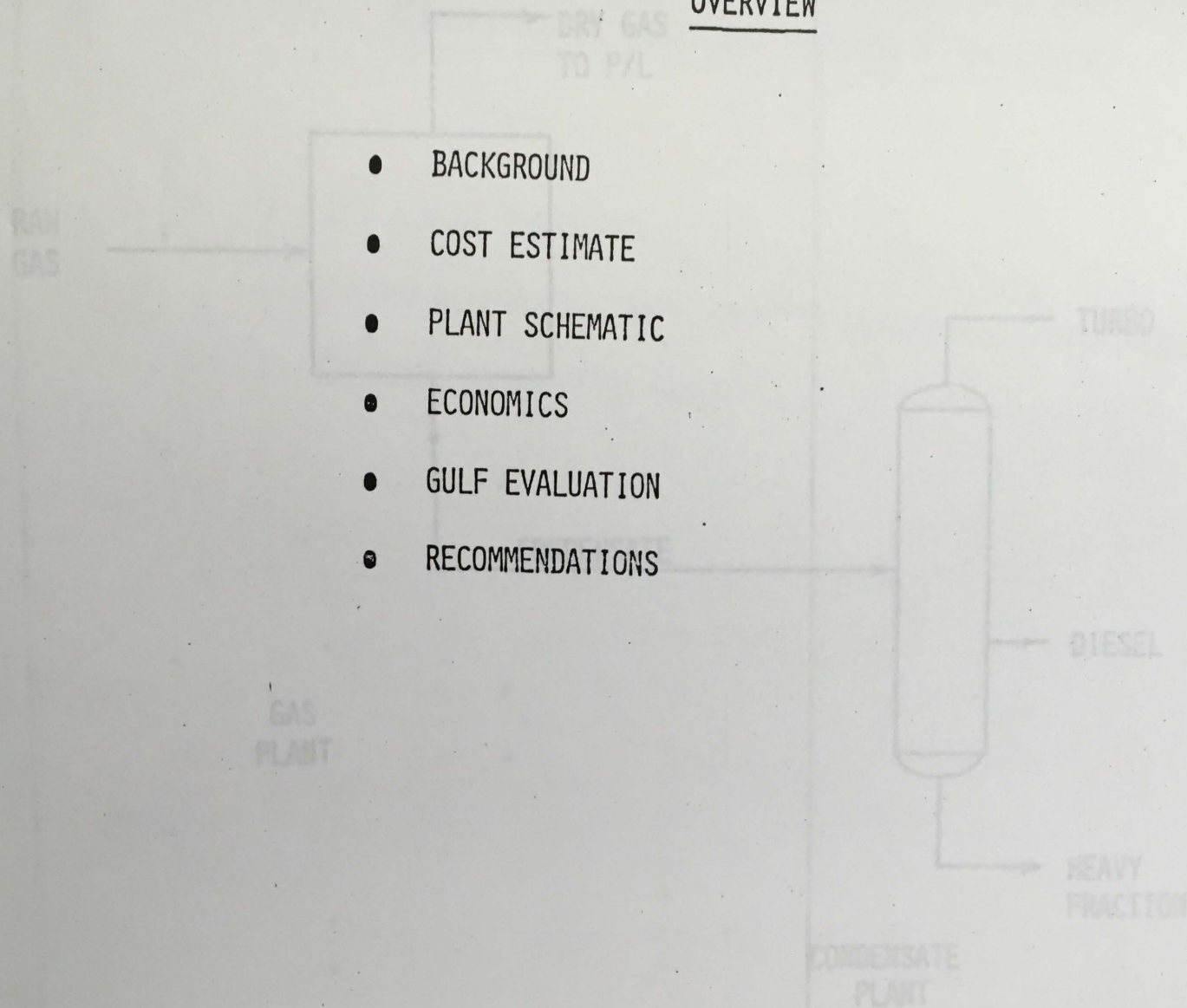
- TO FAMILIARIZE THE COMMITTEE WITH THE RESULTS.
- TO OBTAIN THE COMMITTEE'S INPUT FOR RECOMMENDATIONS  
TO BE PRESENTED TO P.P.M.G.



# TAGLU CONDENSATE PLANT

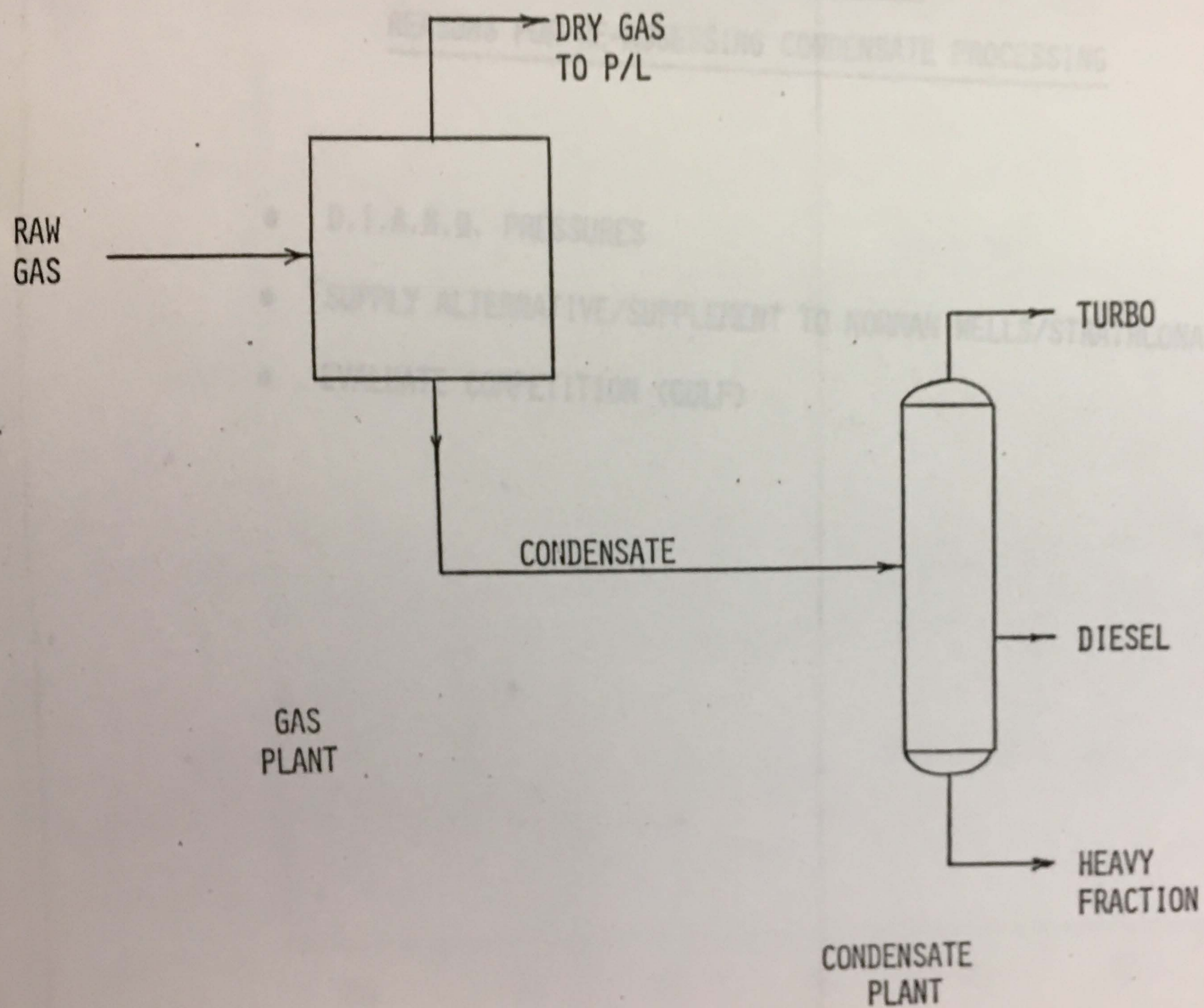
## OVERVIEW

- BACKGROUND
- COST ESTIMATE
- PLANT SCHEMATIC
- ECONOMICS
- GULF EVALUATION
- RECOMMENDATIONS





# TAGLU CONDENSATE PLANT





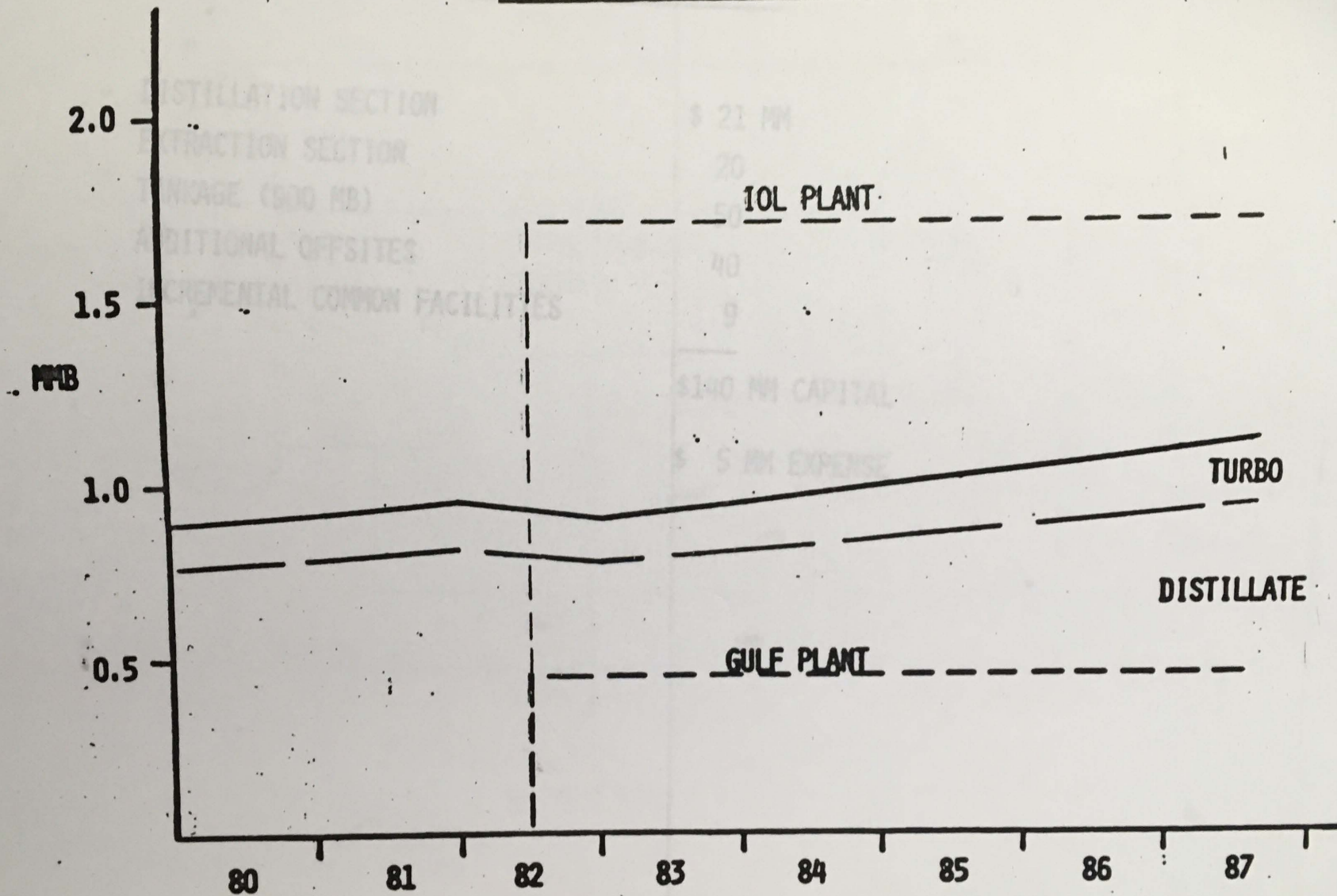
TAGLU CONDENSATE PLANT

REASONS FOR RE-ASSESSING CONDENSATE PROCESSING

- D.I.A.N.D. PRESSURES
- SUPPLY ALTERNATIVE/SUPPLEMENT TO NORMAN WELLS/STRATHCONA
- EVALUATE COMPETITION (GULF)



ENGINEERING CONDENSATE PLANT SUPPLY/DEMAND





# TAGLU CONDENSATE PLANT

## ENGINEERING DIVISION ESTIMATE

DISTILLATION SECTION	\$ 21 MM
EXTRACTION SECTION	20
TANKAGE (900 MB)	50
ADDITIONAL OFFSITES	40
INCREMENTAL COMMON FACILITIES	9

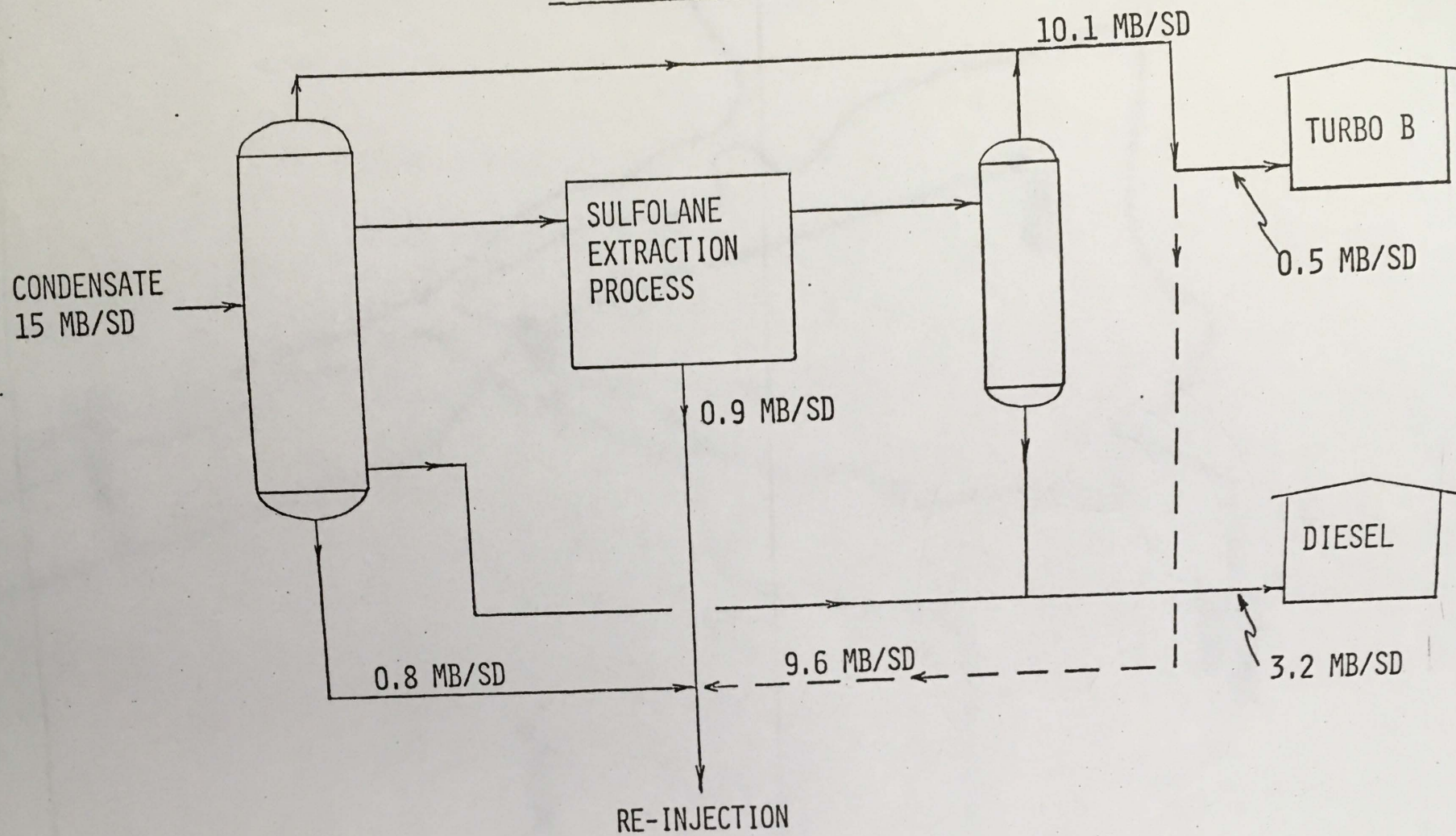
\$140 MM CAPITAL

\$ 5 MM EXPENSE

FED: 5.2 M<sup>3</sup>/YR  
SALABLE PRODUCT: 1.3 M<sup>3</sup>/YR

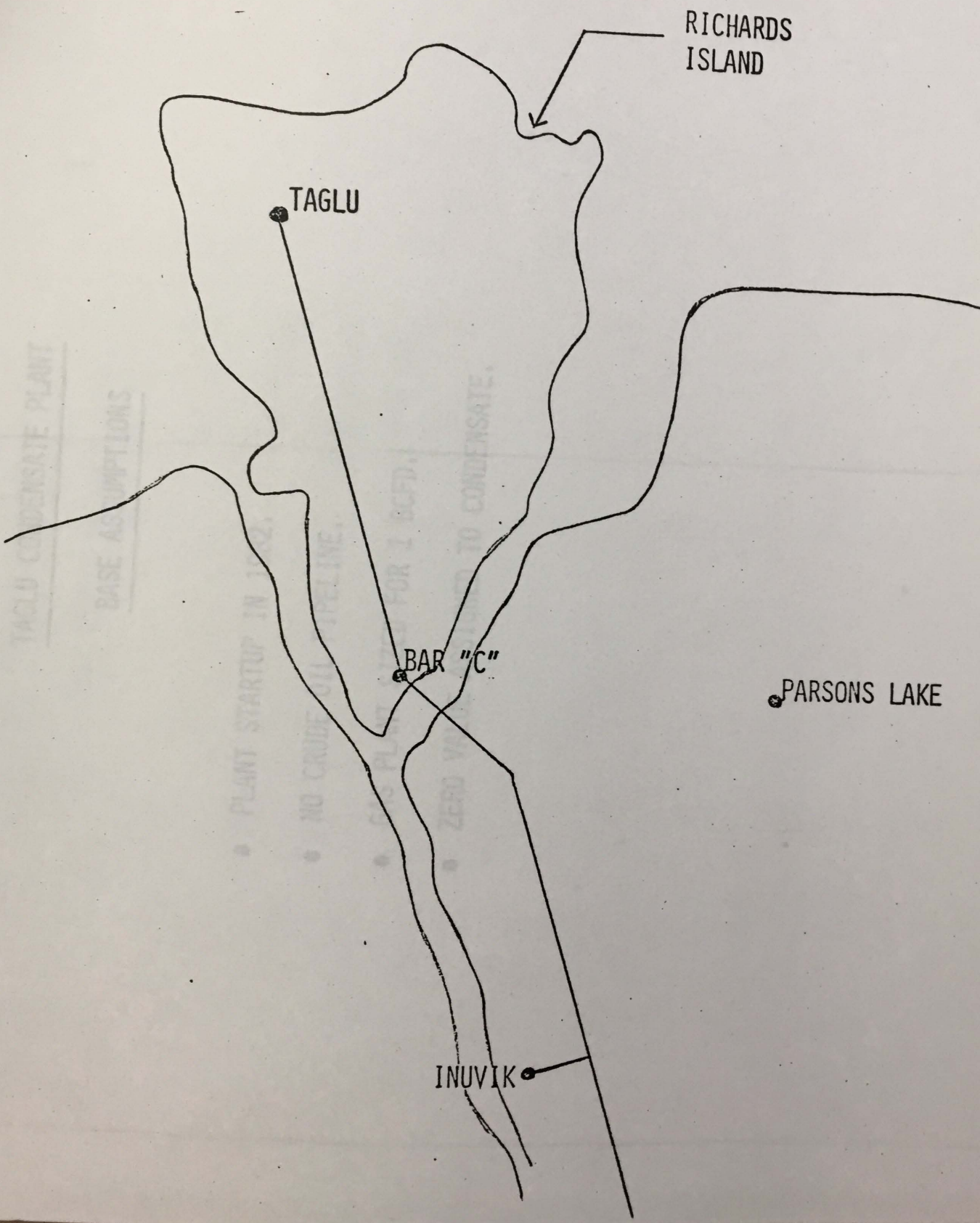


# TAGLU CONDENSATE PLANT



FEED: 5.2 MMB/YR  
SALABLE PRODUCT: 1.3 MMB/YR







## TAGLU CONDENSATE PLANT

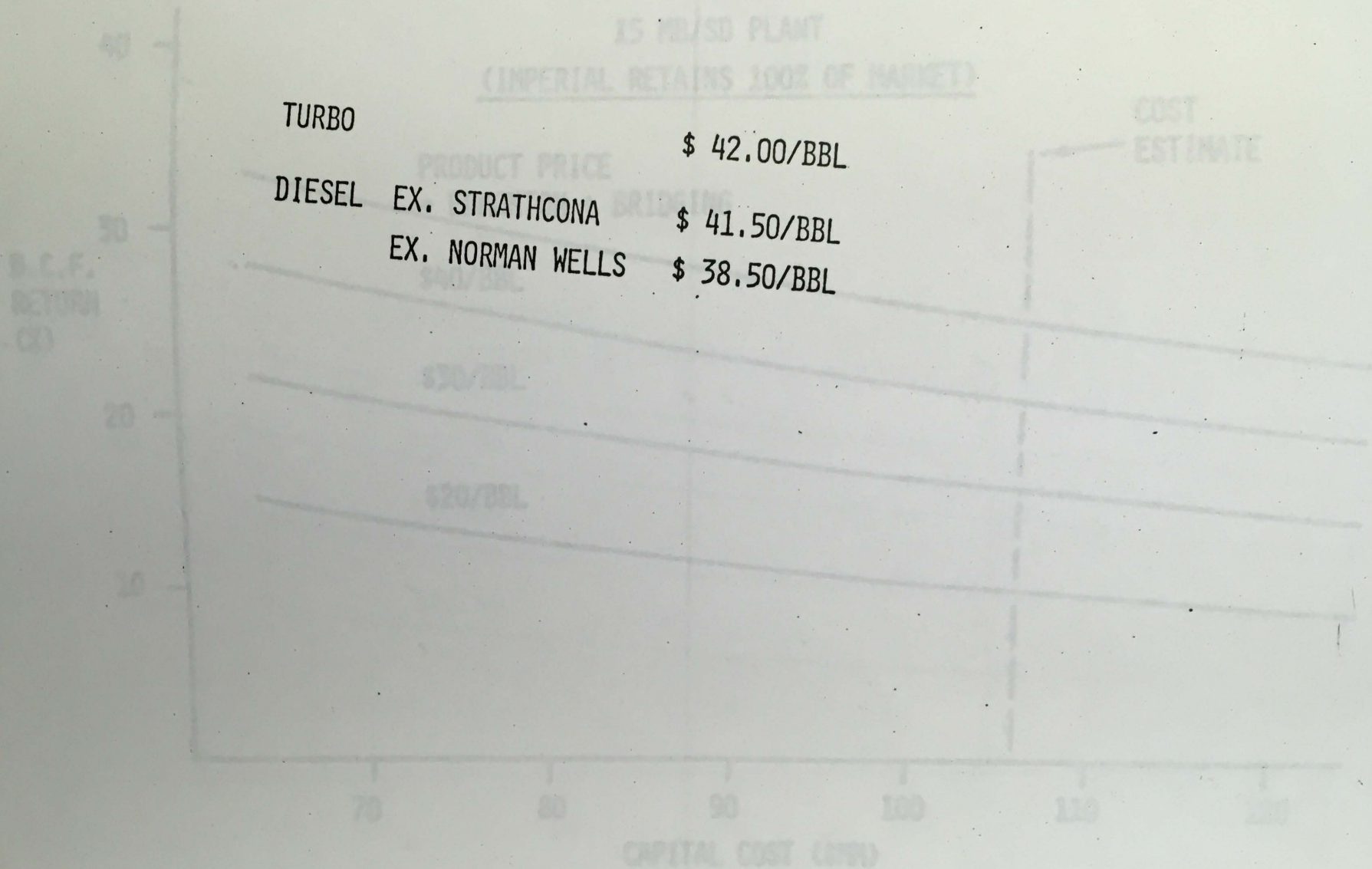
### BASE ASSUMPTIONS

- PLANT STARTUP IN 1982.
- NO CRUDE OIL PIPELINE.
- GAS PLANT SIZED FOR 1 BCFD.
- ZERO VALUE ASSIGNED TO CONDENSATE.

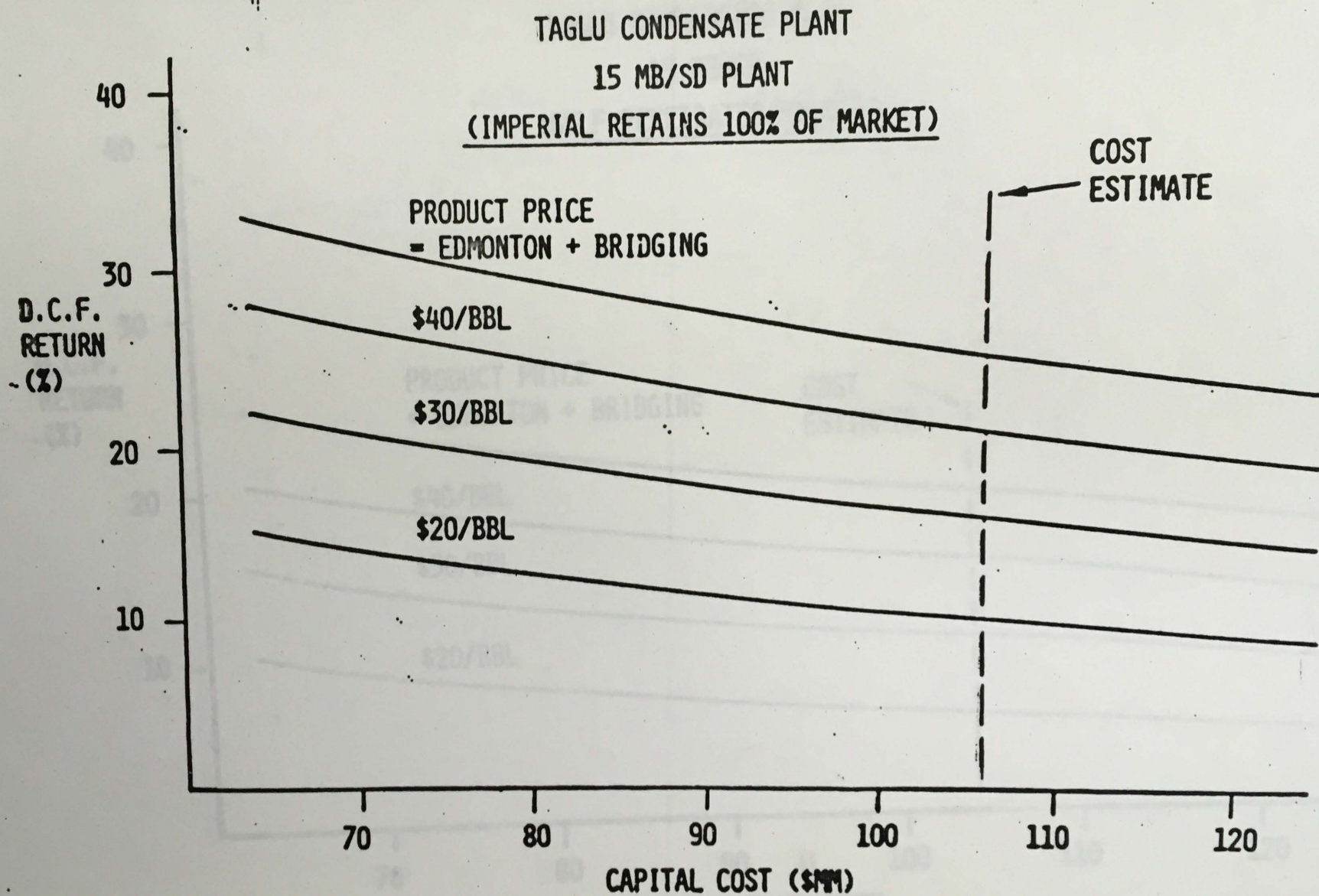


TAGLU CONDENSATE PLANT  
1982 INUVIK PRODUCT PRICES

TURBO \$ 42.00/BBL  
DIESEL EX. STRATHCONA \$ 41.50/BBL  
EX. NORMAN WELLS \$ 38.50/BBL





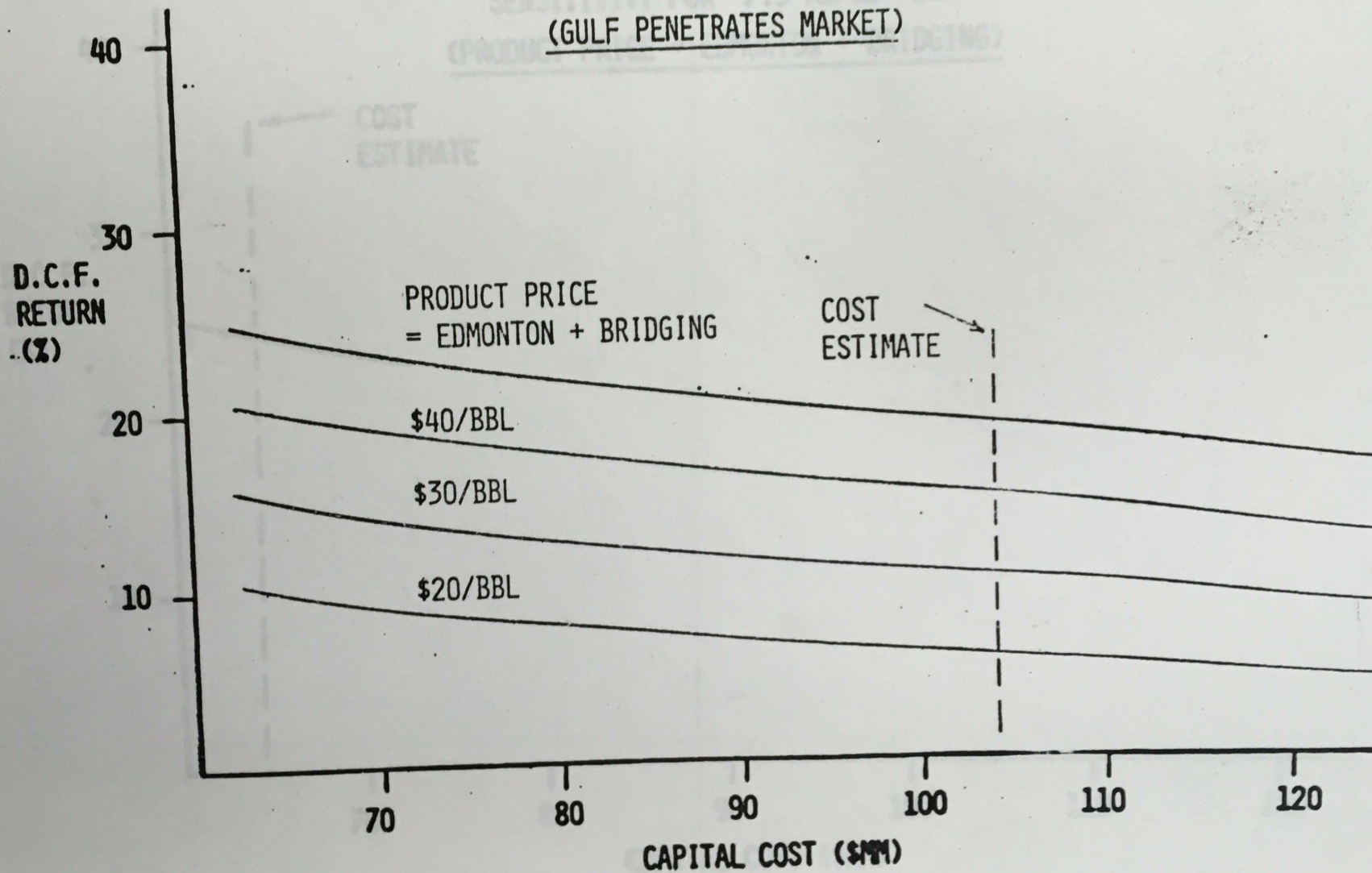




# TAGLU CONDENSATE PLANT

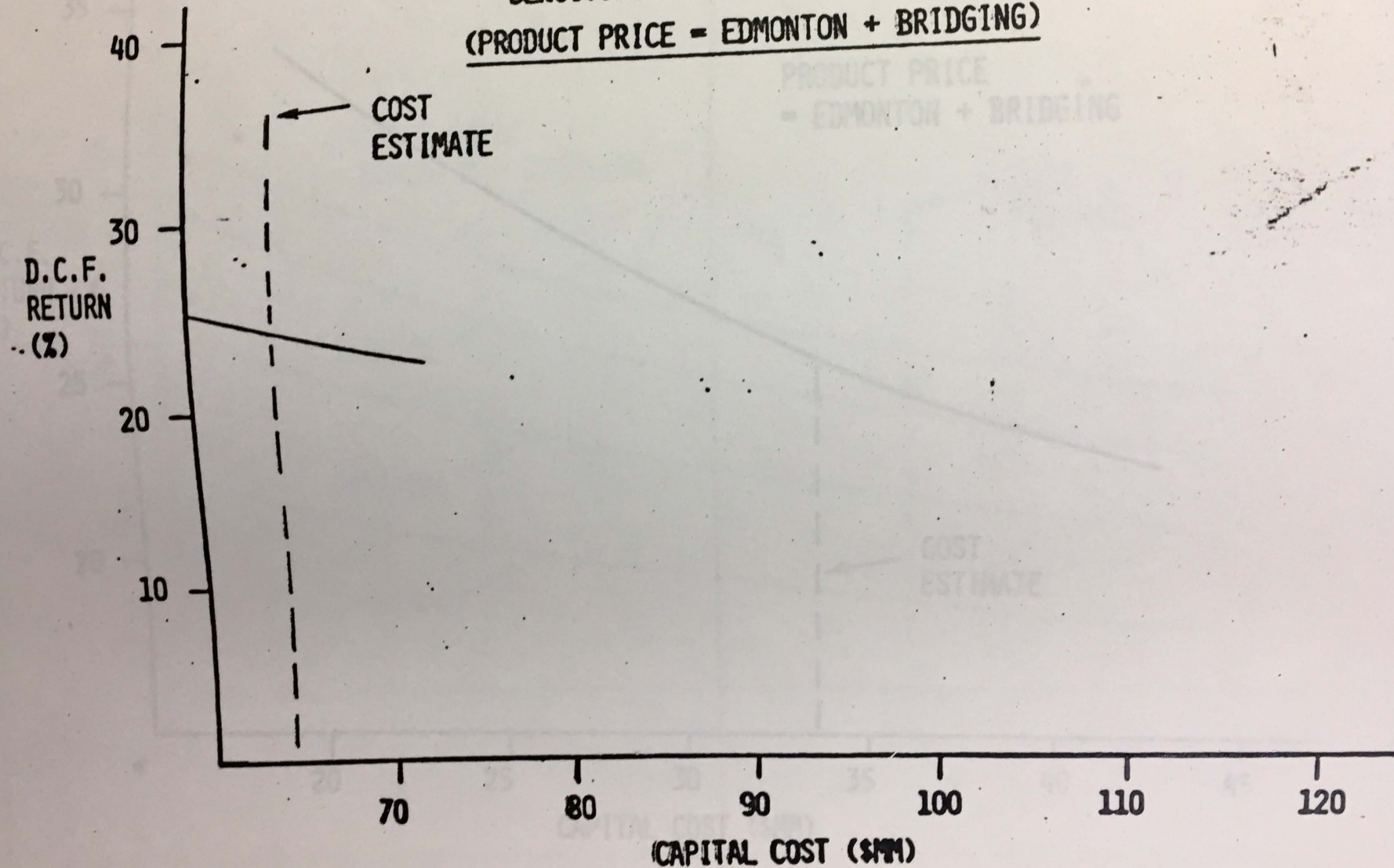
15 MB/SD

(GULF PENETRATES MARKET)



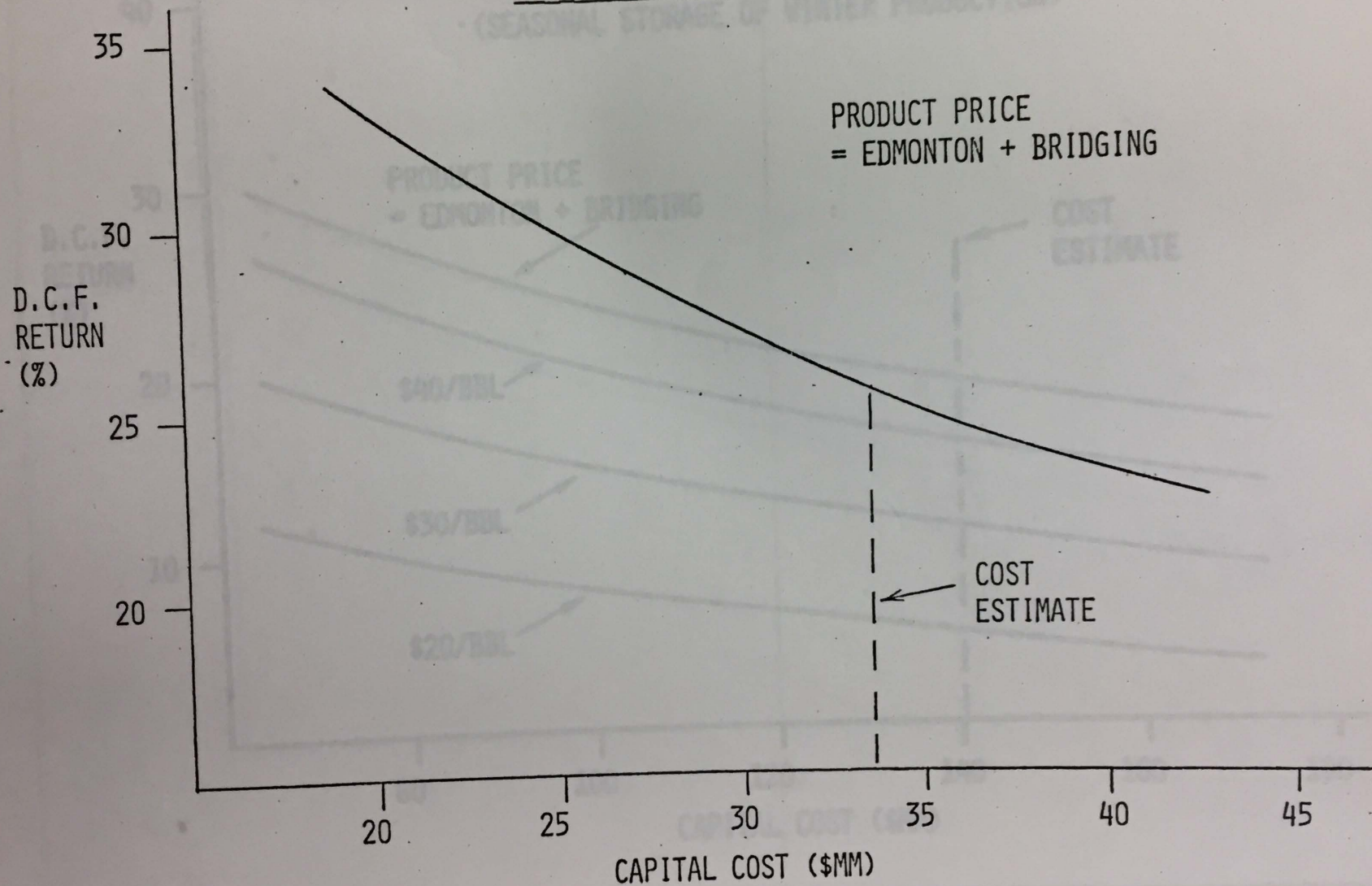


SENSITIVITY FOR 7.5 MB/SD PLANT  
(PRODUCT PRICE = EDMONTON + BRIDGING)





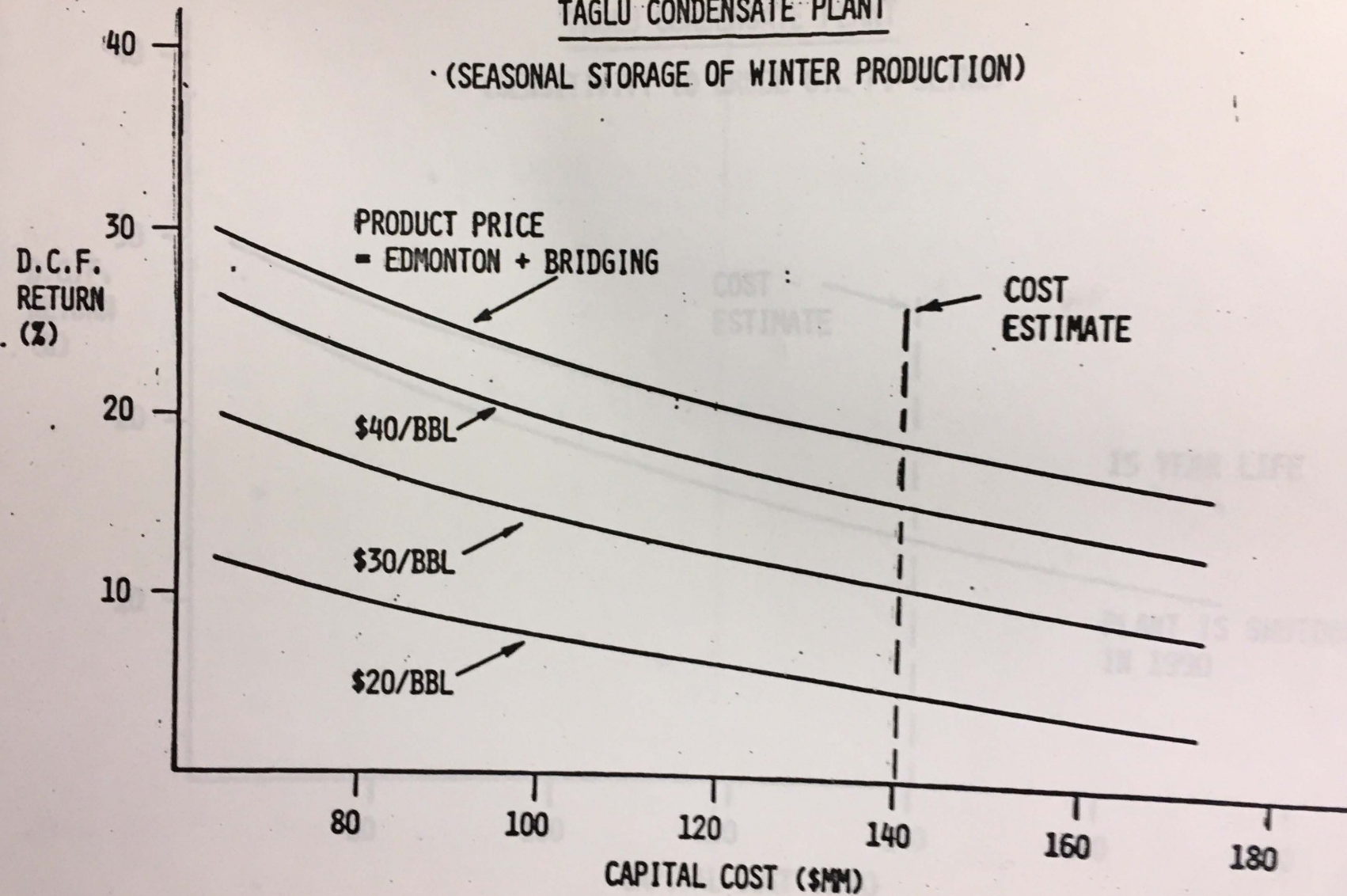
# PARSONS LAKE CONDENSATE PLANT





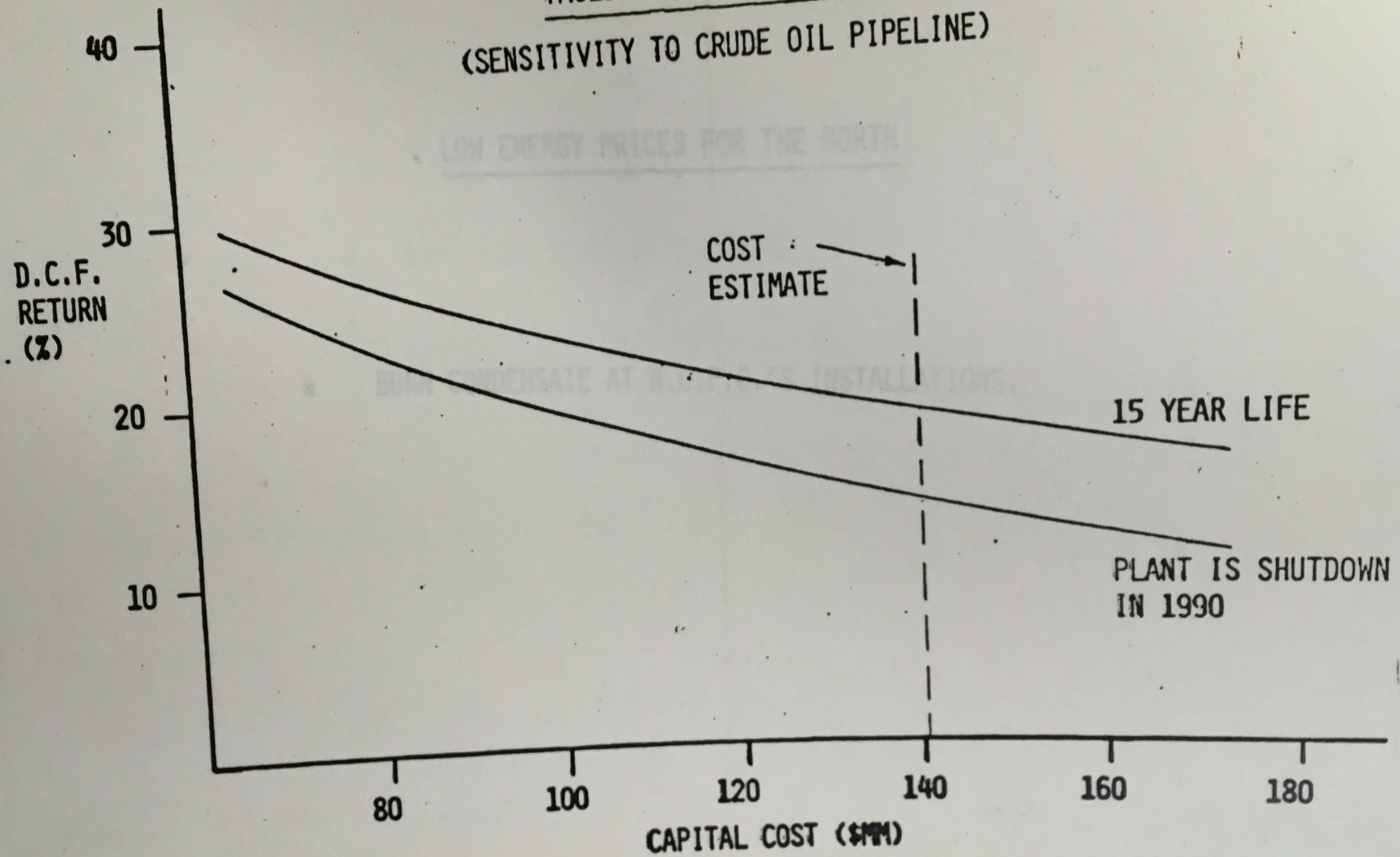
# TAGLU CONDENSATE PLANT

(SEASONAL STORAGE OF WINTER PRODUCTION)





TAGLU CONDENSATE PLANT  
(SENSITIVITY TO CRUDE OIL PIPELINE)





LOW ENERGY PRICES FOR THE NORTH

- BURN CONDENSATE AT N.C.P.C.'S INSTALLATIONS.



## TAGLU CONDENSATE PLANT

### CONCLUSIONS

- GULF WILL CONSTRUCT A PLANT.
- PROFITABILITY FOR AN I.O.L. PLANT WOULD BE:
  - 18% IF A FREE PRICING SYSTEM IS PERMITTED.
  - 10% IF EDMONTON PRICE LEVELS ARE DICTATED..



## TAGLU CONDENSATE PLANT

### RECOMMENDATIONS

- PREPARE TO DISCUSS RESULTS WITH D.I.A.N.D.
- NO ADDITIONAL TECHNICAL STUDIES BE CONDUCTED UNTIL D.I.A.N.D. ESTABLISHES A PRICING POLICY.



## NORMAN WELLS

### OVERVIEW

- BACKGROUND
- 1944 OPERATIONS AGREEMENT
- 1975 AGREEMENT
- EFFECT OF GAS P/L
- NAPHTHA TANKAGE
- BUDGETS TO 1982
- RESERVOIR EVALUATION
- RECOMMENDATIONS



NORMAN WELLS

BACKGROUND

- FEDERAL GOVERNMENT OWNS 1/3 OF CRUDE RESERVE (IMPERIAL OWNS 2/3).
- IMPERIAL (PRODUCTION DEPARTMENT) IS RESPONSIBLE FOR OPERATIONS.
- ALL PRICE INCREASES MUST BE APPROVED BY D.I.A.N.D.
- TOTAL PRICE INCREASE WAS 4¢/GAL. FROM 1962 TO 1974.



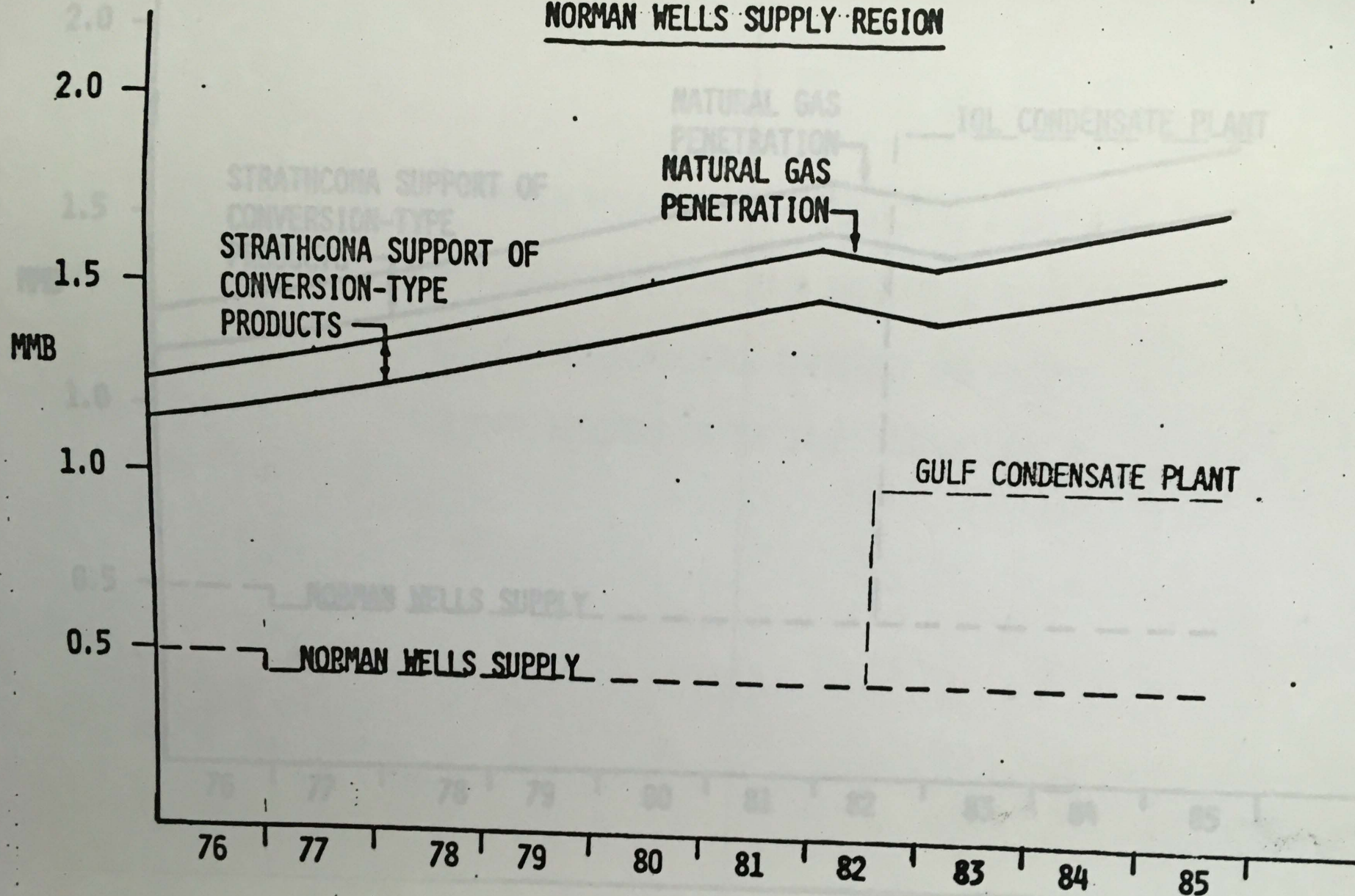
NORMAN WELLS

CURRENT OPERATIONS

- MAXIMUM DISTILLATE OPERATION.
- 230 MB H.F.O. FLARED.
- 70 MB NAPHTHA RETURNED TO FORMATION.
- PRODUCT SHORTFALLS SUPPLIED EX. STRATHCONA AND PRICED TO RECOVER FULL COSTS + 9%.

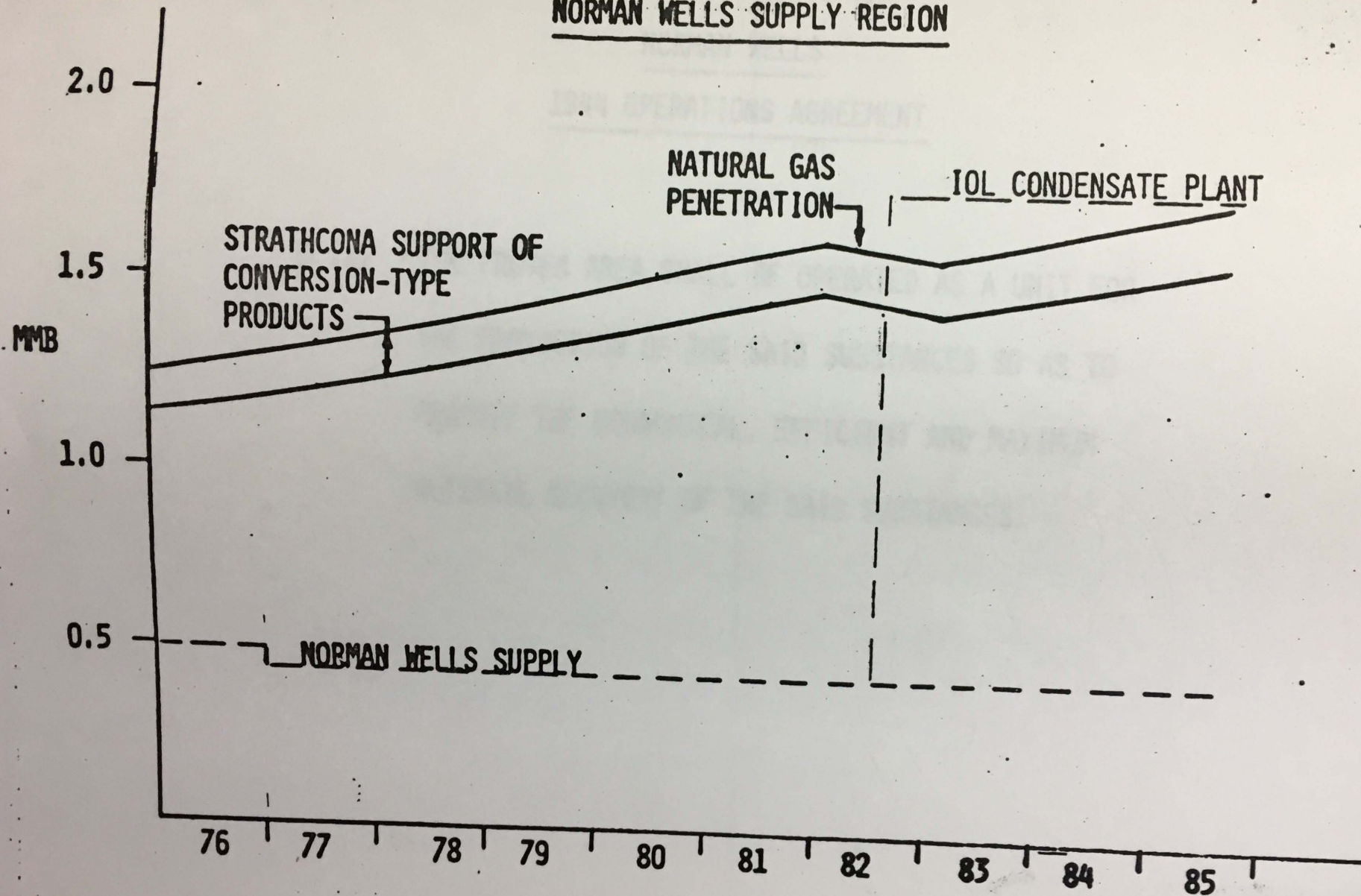


OVERHEAD SUPPLY/DEMAND  
NORMAN WELLS SUPPLY REGION





OVERHEAD SUPPLY/DEMAND  
NORMAN WELLS SUPPLY REGION





NORMAN WELLS  
1944 OPERATIONS AGREEMENT

- 5 (A) THE PROVEN AREA SHALL BE OPERATED AS A UNIT FOR  
THE PRODUCTION OF THE SAID SUBSTANCES SO AS TO  
PROMOTE THE ECONOMICAL, EFFICIENT AND MAXIMUM  
ULTIMATE RECOVERY OF THE SAID SUBSTANCES.



NORMAN WELLS

1944 OPERATIONS AGREEMENT

26. IN THE EVENT OF IMPERIAL FAILING OR BEING UNABLE TO  
PROPERLY CONTINUE THE OPERATION OF THE PROVEN AREA OR  
TO FULFIL OR PERFORM ANY OTHER OBLIGATIONS .....  
AND IF SUCH FAILURE SHALL CONTINUE FOR 90 DAYS  
AFTER IMPERIAL SHALL HAVE BEEN NOTIFIED THEREOF .....  
THE MINISTER MAY BY NOTICE IN WRITING TO IMPERIAL  
AND WITHOUT OTHER FORMALITY WHATSOEVER, TERMINATE  
THIS AGREEMENT.



NORMAN WELLS  
1975 AGREEMENT

CALCULATION OF NORMAN WELLS CRUDE PRICE

GROSS CRUDE VALUE - GROSS SALES REVENUE  
LESS MARKETING EXPENSE  
LESS REFINERY EXPENSE  
LESS FIXED RETURN OF 52½¢/BBL TO REFINER

CRUDE PRICE -  $\frac{\text{GROSS CRUDE VALUE}}{\text{NUMBER OF BARRELS OF CRUDE PRODUCED}}$



NORMAN WELLS  
1975 AGREEMENT

BENEFITS

- PRICES OF NORMAN WELLS PRODUCTS WILL BE ALLOWED TO RISE IN EQUAL ANNUAL INCREMENTS TO ATTAIN THE LESSER OF:
  - (1) A NORMAN WELLS CRUDE VALUE EQUIVALENT TO EDMONTON CRUDE BY 1980 LESS A \$1.50/BBL. PIPELINE TARIFF
  - OR
  - (2) CURRENT DOMESTIC PRICE OF SIMILAR PRODUCTS EX STRATHCONA

OBLIGATIONS

- IMPERIAL SHALL PROVIDE ADEQUATE WINTER STORAGE FOR PRODUCTS, INCLUDING HEAVY FUEL OIL, TO ENSURE MAXIMUM UTILIZATION AND SALE OF EACH PRODUCT.
- IMPERIAL SHALL IMPLEMENT (AT NORMAN WELLS) THE GOVERNMENT'S SOCIAL GUIDELINES FOR THE NORTH, IN PARTICULAR AS THEY RELATE TO THE TRAINING AND EMPLOYMENT OF NATIVE PEOPLE.



## NORMAN WELLS

### STATUS OF 1975 AGREEMENT

#### PRICE INCREASES

- 4¢/GAL. WAS REALIZED IN 1975.
- 7-8¢/GAL./ANNUUM IS REQUIRED TO ACHIEVE \$13.50/BBL CRUDE BY 1980.
- 4¢/GAL. WAS GRANTED FOR 1976.

#### H.F.O. TANK

- \$2345 M CAPITAL, \$150 M EXPENSE HAS BEEN APPROPRIATED.
- TANK CONSTRUCTION IS ON SCHEDULE FOR SEPT. 1977 COMPLETION.

#### ADDITIONAL SEASONAL STORAGE

- NAPHTHA STORAGE?

#### NORTHERN NATIVE EMPLOYMENT PROGRAM

- OBJECTIVE OF 20 NATIVES EMPLOYED BY 1980.

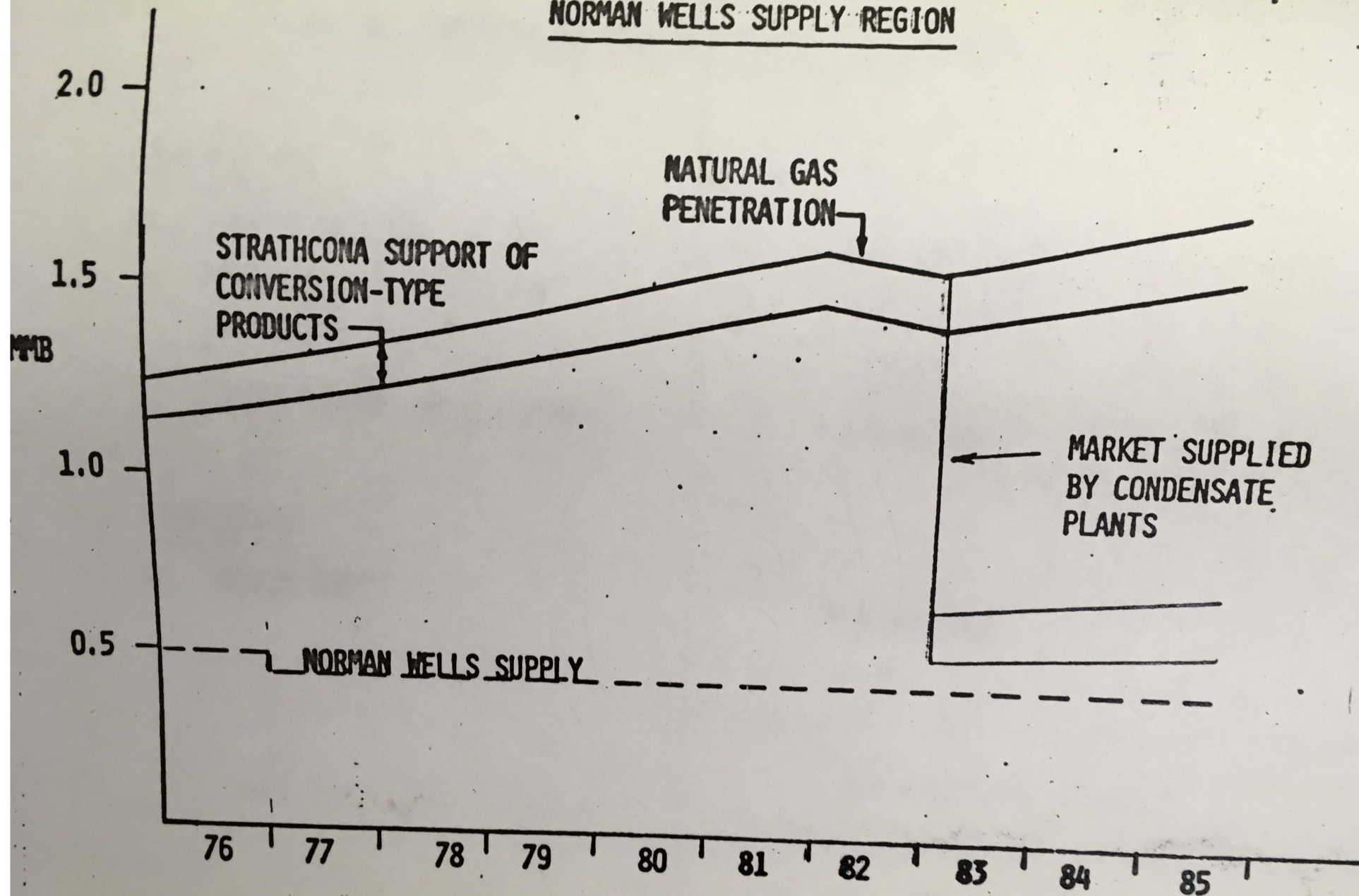


NORMAN WELLS  
1975 AGREEMENT  
ECONOMICS

<u>SITUATION</u>	<u>NORMAN WELLS CRUDE PRICE</u>	<u>NET EARNINGS</u>	<u>R.O.C.E.</u>
1974 BACK CALCULATED FOR CURRENT TAXATION	\$3.22/BBL	\$0.7 MM	7
1975 ACTUAL	4.51	1.1	9.5
<u>1980 POTENTIAL</u>			
AGREEMENT IN EFFECT	13.50	\$3 MM	13
4¢/GAL./ANNUM INCREASE	8.50	1.5	8
ZERO PRODUCT PRICE INCREASE	3.50	0	-



OVERHEAD SUPPLY/DEMAND  
NORMAN WELLS SUPPLY REGION





NORMAN WELLS

H.F.O. COMPETITION FROM ALTERNATE FUELS (1982)

NATURAL GAS

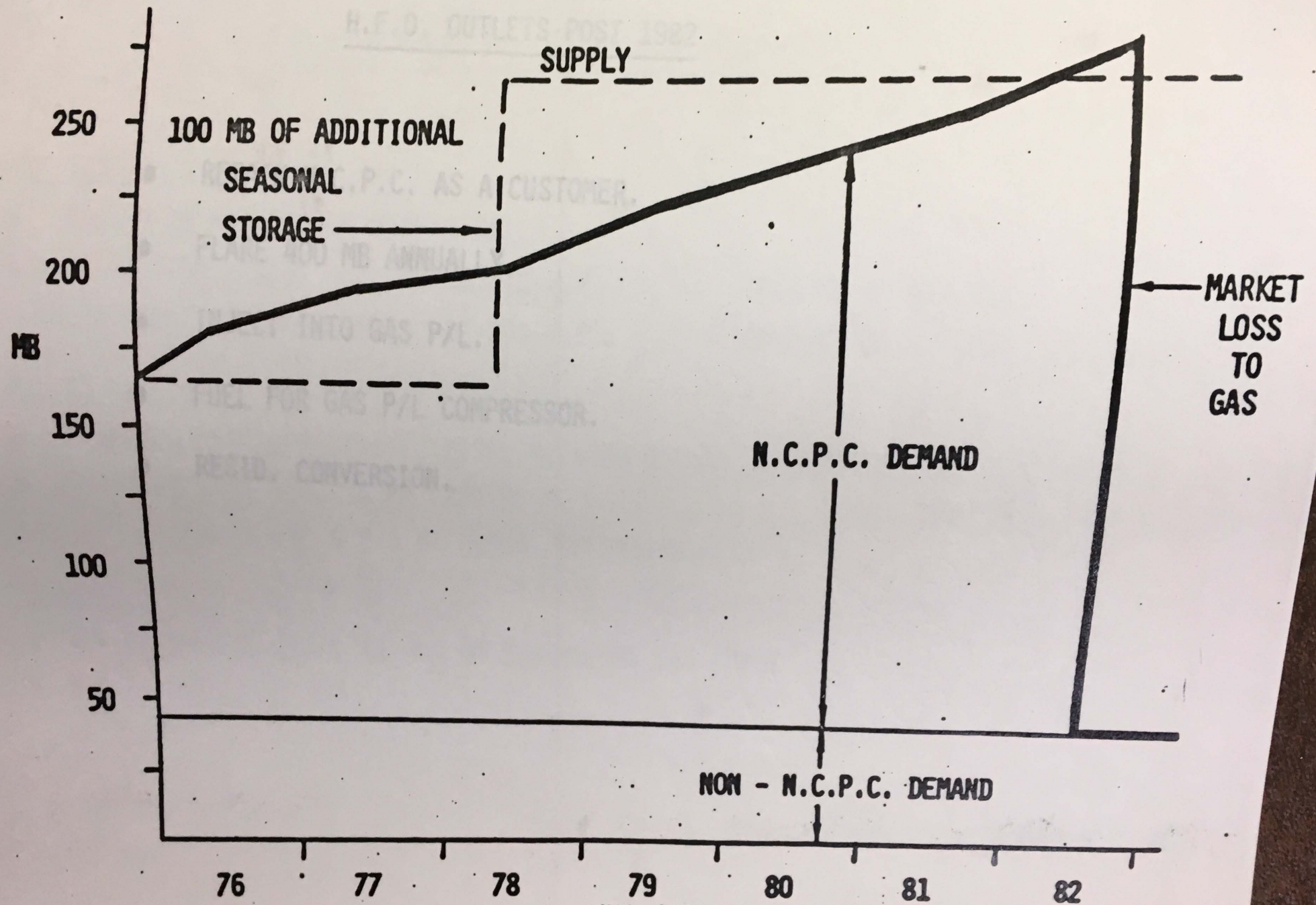
• INUVIK GAS COST	\$14.50/FOEB
• INUVIK H.F.O. PRICE	\$13.00/BBL
LESS BARGE TARIFF	<u>7.00</u>
EQUALS NORMAN WELLS NETBACK	\$ 6.00/BBL

CONDENSATE

• INUVIK COST	\$ 6.00/FOEB
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# NORMAN WELLS HFO SUPPLY/DEMAND





## NORMAN WELLS

### H.F.O. OUTLETS POST 1982

- RETAIN N.C.P.C. AS A CUSTOMER.
  - LOCATED 25 MILES FROM NORMAN WELLS
  - GAS P/L COMPRESSOR 30,000 H.P. (450 MB OF H.F.O.)
  - REFRIGERATOR 10,000 H.P. (250 MB OF H.F.O.)
  - FUEL FOR GAS P/L COMPRESSOR.
  - 3" HEATED AND REFRIGERATED PIPELINE WITH DOUBLE INSULATION
  - RESID. CONVERSION.
- ESTIMATED COST: \$10 MM CAPITAL  
\$ 2.5 MM ANNUAL OPERATING COST

#### ECONOMICS

- H.F.O. SOLD TO CASPL AT 80% OF EQUIVALENT GAS VALUE.
- D.C.F. RETURN IS 15%.



## NORMAN WELLS

### H.F.O. FOR GAS P/L COMPRESSOR STATION

#### STATION DESCRIPTION

- LOCATED 25 MILES FROM NORMAN WELLS
- GAS P/L COMPRESSOR                      30,000 H.P.                      (450 MB OF H.F.O.)
- REFRIGERATION COMPRESSOR      17,000 H.P.                      (250 MB OF H.F.O.)

#### P/L TO STATION

- 3" HEATED AND REFRIGERATED PIPELINE WITH DOUBLE INSULATION
- ESTIMATED COST:      \$10 MM CAPITAL  
                                 \$ 2.5 MM ANNUAL OPERATING COST

#### ECONOMICS

- H.F.O. SOLD TO CAGPL AT 80% OF EQUIVALENT GAS VALUE.
- D.C.F. RETURN IS 15%.



NORMAN WELLS  
NAPHTHA TANKAGE

1975 AGREEMENT IS REALIZED

- ADDITIONAL PRODUCT SALES VALUED AT CRUDE.
  - TANK LIFE TERMINATES IN 1982 D.C.F. IS NEGATIVE
- |      |     |
|------|-----|
| 1985 | 11% |
| 1990 | 19% |

CRUDE PRICE IS NOT LIMITING

- ADDITIONAL PRODUCT SALES VALUED AT EDMONTON PRICE PLUS BRIDGING.
  - TANK LIFE TERMINATES IN 1982 D.C.F. IS 13%
- |      |     |
|------|-----|
| 1985 | 25% |
| 1990 | 31% |



NORMAN WELLS

NORMAN WELLS

REFINERY FACILITIES REQUIRED

GAS PLANT

- PRESENTLY FLARE 4 MMCFD OF GAS
- GAS PLANT COST OF \$15 MM, D.C.F. RETURN = 17%



NORMAN WELLS

REFINERY FACILITIES REQUIRED

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
"FIX-UP" BUDGET - NO EXPANSION (\$MM)	1.0	1.9	1.2	1.0	3.1	2.9
"DO MINIMUM" BUDGET (\$MM)	0.5	<hr/>				





NORMAN WELLS  
VALUE OF RESERVOIR

ASSUMPTIONS

- CRUDE P/L IN 1990.
- PRODUCING INVESTMENT 1990
- PRODUCTION LEVELS: 20 MM/D
- ULTIMATE RECOVERY: 40%

NORMAN WELLS

PRODUCING INVESTMENT

ECONOMIC \$5MM (MINIMUM) REQUIRED TO MAINTAIN CURRENT LEVEL  
OF OPERATION BEYOND 1980.

CONCERN

- NORMAN WELLS AGREEMENT WILL BE DUE FOR RENEWAL IN 1987.



NORMAN WELLS  
VALUE OF RESERVOIR

ASSUMPTIONS

- CRUDE P/L IN 1990.
- PRODUCING INVESTMENT: \$50 MM PRIOR TO 1990
- PRODUCTION LEVELS: 20 MB/D
- ULTIMATE RECOVERY: 40%

ECONOMICS

- D.C.F. RETURN ON INVESTMENT: 25%
- PRESENT VALUE AT 10%: \$75 MM AFTER TAX

CONCERN

- NORMAN WELLS AGREEMENT WILL BE DUE FOR RENEWAL IN 1987.



NORMAN WELLS  
RECOMMENDATIONS

NORMAN WELLS

- (1) PROCEED WITH "STATUS QUO" OPERATIONS, RESPONDING TO GOVERNMENTAL DEMANDS WHICH COULD INCLUDE NAPHTRA TANKAGE.

CONCLUSION

- (2) PROVIDE ADEQUATE HOUSING TO MEET OBJECTIVES OF NORTHERN NATIVE EMPLOYMENT PROGRAM.

- (3) PRODUCTIONS CONDUCT A RESERVOIR STUDY TO DETERMINE:

THE NORMAN WELLS OUTLOOK DOES NOT WARRANT A "STEPPED-UP"

INVESTMENT PROGRAM.

- (4) AFTER A GAS P/L PERMIT HAS BEEN GRANTED, FORMALLY APPROACH CAGSL (OR FOOTHILLS) RE. FIRING A GAS P/L COMPRESSOR WITH H.F.O.



NORMAN WELLS  
RECOMMENDATIONS

- (1) PROCEED WITH "STATUS QUO" OPERATIONS, RESPONDING TO GOVERNMENTAL DEMANDS WHICH COULD INCLUDE NAPHTHA TANKAGE.
- (2) PROVIDE ADEQUATE HOUSING TO MEET OBJECTIVES OF NORTHERN NATIVE EMPLOYMENT PROGRAM.
- (3) PRODUCING CONDUCT A RESERVOIR STUDY TO DETERMINE:
  - (A) INVESTMENT REQUIRED TO MAINTAIN PRODUCTION TO 1982.
  - (B) ULTIMATE VALUE OF CRUDE FIELD.
- (4) AFTER A GAS P/L PERMIT HAS BEEN GRANTED, FORMALLY APPROACH CAGSL (OR FOOTHILLS) RE. FIRING A GAS P/L COMPRESSOR WITH H.F.O.



NORMAN WELLS

PERMANENT EMPLOYMENT (1974)

TRANSPORTATION - PRIVATE	46
FEDERAL GOVERNMENT (1)	40
IMPERIAL OIL	32
LOCAL SERVICES	46
N.C.P.C.	<u>3</u>
	167

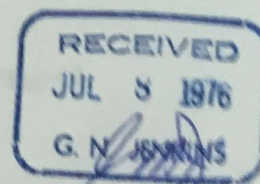
NOTE: (1) 28 EMPLOYED BY M.O.T.



# MEMORANDUM

MARKETING DEPARTMENT

July 7, 1976



Messrs. G.N. Jenkins ✓  
G.K. Humphreys  
B.T. Reilly  
L.C. Sevick  
G.H. Thomson

Before general circulation of the attached minutes, *Comments forwarded to Bob Roblin.*  
I would appreciate your comments as to the appropriateness of the minutes. *END*

R.F. ROBLIN  
Secretary,  
Arctic Review Committee

RFR/1d1



ARCTIC REVIEW COMMITTEE

MINUTES OF MEETING OF JULY 5, 1976

MEMBERS PRESENT:

G.N. Jenkins, Chairman  
G.K. Humphreys (for C.E. Overturf)  
L.C. Sevic  
G.H. Thomson  
B.T. Reilly

GUESTS:

R. Horsfield  
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J.A. Stewart  
A. Dedesko

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TAGLU CONDENSATE PLANT

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The Committee requested that further examination be done to determine possible better business opportunities for the disposition of raw condensate or products from a full scale or smaller plant, or a plant without the sulfolane extraction process.

It was suggested the possible disposition of raw condensate could be:

- sold to Northern Canada Power Commission <sup>after 1982</sup> at Inuvik to replace Norman Wells heavy fuel oil used to generate heat,
- supply by pipeline to power the gas line compressor and refrigeration stations,
- sell to Gulf who could inject it into their oil pool at Parsons Lake.

Because of the high cost of the sulfolane extraction process that removes the aromatics, it was agreed that more information is required on the quality of diesel and turbo B from the distillation tower. Possible sale of these products could be:

- turbo B by pipeline to power the gas line compressor and refrigeration stations,
- possible markets for low cetane diesel.



Before an investment decision is made, a product pricing commitment is required from the Department of Indian and Northern Development.

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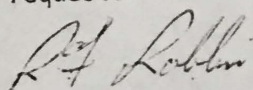
The Committee recommended that rather than wait until after the gas pipeline permit is granted, Imperial should approach CAGSL regarding supply of Norman Wells heavy fuel oil as the energy source for the gas pipeline compressor station. It would be preferable if the station is located close to Norman Wells to reduce cost of the heavy fuel oil pipeline. An alternate would be to have NCPC or CAGSL build a heavy fuel oil fired electrical generating plant at Norman Wells with transmission line to the station.

The Committee did not agree with the status quo recommendation for the Norman Wells operation and suggested that a study be undertaken to determine the <sup>optimum</sup> maximum utilization of the Norman Wells resource, i.e.,

- a "fix-up" budget rather than a "do minimum",
- ? - <sup>or reduced</sup> no heavy fuel oil or natural gas flaring,
- <sup>or minimal</sup> no naphtha injected to formation,
- increase crude production and refinery expansion.

After the economic and political considerations are evaluated, it may be necessary to meet with DIAND and make whatever changes may be needed to the 1944 Agreement or consider other alternatives.

Copies of the vugraphs presented are attached for the members and are available to others upon request.

  
R.F. ROBLIN  
Secretary

RFR/ldl  
July 7, 1976

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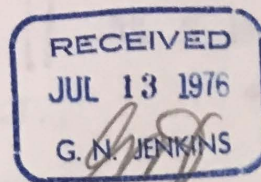
cc: G.N. Jenkins	G.H. Thomson	D.M. Penrose	G.K. Whynot
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G.L. Haight	R. Horsfield	J.C. Underhill	J.A. Stewart
P.J. Levins	C.E. Langston	W.A. West	



# MEMORANDUM

MARKETING DEPARTMENT

July 12, 1976



## Arctic Review Committee

Messrs. G.N. Jenkins ✓  
H.B. McGonigal  
C.E. Overturf  
B.T. Reilly  
L.C. Sevick  
G.H. Thomson

Enclosed is the letter Mr. R. Horsfield received from the Government of Northwest Territories concerning Norman Wells expansion. Mr. Horsfield requested that this be circulated to the Committee.

A handwritten signature in dark ink, appearing to read "R.F. Roblin".

R.F. ROBLIN  
Secretary  
Arctic Review Committee

RFR/ldl

Encl.

cc: R. Horsfield (n/a)  
G.A. Fullerton  
C.E. Langston

Attachments





GOVERNMENT OF THE NORTHWEST TERRITORIES  
CANADA

PLEASE QUOTE

FILE 60 009 000

RECEIVED

JUL 2 1976

41

Yellowknife, N.W.T.,  
X1A 2L9

29 June 1976.

Mr. R. Horsfield,  
Corporate Manager - Arctic,  
Imperial Oil Limited,  
500 - 6th Avenue, S.W.,  
CALGARY, Alberta  
T2P 0S1

Dear Roland:

Please find attached Pages 544 - 545 from the Debates of the 59th Session of the Legislative Assembly of the N.W.T., as per our telephone discussion today. Your comments on Mr. Butters request of the administration to investigate the possibility of further expansion of the facilities at Norman Wells Oil Refinery would be appreciated.

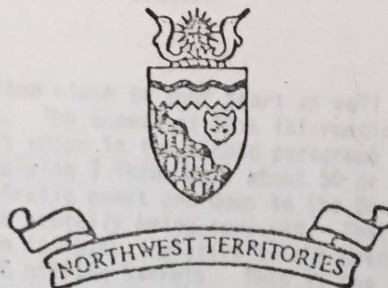
Yours sincerely,

Peter Lofthouse,  
Research and Evaluation  
Division,  
Department of Economic  
Development.

Attachment

FRIDAY, MAY 26 1976





LEGISLATIVE ASSEMBLY OF THE NORTHWEST TERRITORIES  
DEBATES

59th Session

8th Assembly

Official Report

FRIDAY, MAY 28, 1976

Speaker The Honourable David H. Searle, Q.C.



PROCEEDINGS IN COMMITTEE OF THE WHOLE TO CONSIDER INFORMATION ITEMS 4-59, 5-59, 12-59, 16-59, 18-59 AND 24-59

THE CHAIRMAN (Mr. Nickerson): The committee will please come to order to study Information Items 4-59, 5-59, 12-59, 16-59, 18-59 and 24-59, starting with Information Item 4-59 concerning a possibility of constructing a small oil refinery. Mr. Butters.

Information Item 4-59: Mini-Oil Refinery

MR. BUTTERS: Mr. Chairman, I know this is an item close to your heart as well because it seems it formed the basis of one of your past motions. The aspect of this information item which I wish to raise was over on the second page and it notes in the second paragraph talking about Norman Wells now, Norman Wells is currently supplying I think only about 50 or 60 per cent of the fuel required in the Mackenzie River along the Arctic coast and down to the Great Slave area but it is only supplying a proportion of what is actually being consumed. That proportion is going to I understand domestic use. My question is this: relative to the potential of Norman Wells the proven reserves are presently about 50 million barrels. This is the figure I heard given as the potential in Norman Wells when it was first found. It says that but the potential may be many times this figure and they are only producing one million barrels per year which is half our requirement. They are punching down wells all over the country, dry holes, and I am wondering why we can not work out a deal with these guys and say, "How about punching a couple more down in Norman Wells and enlarging that field and developing a production plant that can serve not only up the river but down close to Great Slave?" Right now you people are bringing the fuel in from Edmonton. Maybe if Norman Wells had a few more holes down and were producing two million or three million barrels, that more residents could benefit from that.

THE CHAIRMAN (Mr. Nickerson): There certainly would seem to be a discrepancy between the figures here and the figures given to us at an earlier date by Imperial Oil. Mr. Deputy Commissioner?

DEPUTY COMMISSIONER PARKER: Mr. Chairman, although I had seen this information item after it was prepared I am afraid I did not read it carefully enough because I do not find this statement in that second paragraph on page 2 to be very accurate. I apologize for this. Whether an oil field is of a certain size or a mine is of a certain size is always problematical until the last drop or the last ounce has been produced. However, the information that Imperial Oil has given us over the years would indicate that the limits of the field are well known, that there has been a very considerable amount of seismic work done there to outline the field, that it has been drilled off to the extent that any more holes would be inefficient and further that it is being produced now at what I hear is the most efficient rate. My understanding is, subject to correction, that if the field were produced at any greater rate the likelihood of the inflow of salt water would be very great. I am afraid, therefore, that the information here may well be misleading. The potential in the area though is another matter. The field itself I am confident has been fully outlined but in the area and I mean in a very much larger area there may well be greater potential that has not yet been fully explored.

THE CHAIRMAN (Mr. Nickerson): Mr. Butters.

Expansion Of Facilities At Norman Wells

MR. BUTTERS: I am sorry to hear that reply from the Deputy Commissioner but as hope dies eternal or whatever it does eternal I wonder if we could examine that one sentence "Expansion of the facilities at Norman Wells would seem to be a real possibility", and maybe we could get a later report on that at another session, whether it is a real possibility or not.

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THE CHAIRMAN (Mr. Nickerson): Thank you, Mr. Deputy Commissioner.

MR. BUTTERS: Possibly if we are developing an executive for research as by the two motions this morning, maybe we could get a report from an independent petroleum consultant relative to the potential of the field.



THE CHAIRMAN (Mr. Nickerson): Are there any more Members who wish to speak to Information Item 4-59? Hon. Arnold McCallum, did you signify?

HON. ARNOLD MCCALLUM: No.

Information Item 5-59: Vacation Travel Assistance

THE CHAIRMAN (Mr. Nickerson): Turning to Information Item 5-59, Vacation Travel Assistance, Mr. Butters.

MR. BUTTERS: Mr. Chairman, this item was of interest to Members I think at our first session and so much so that a motion was introduced and approved by this house relative to vacation travel and the desirability that people would be taking their holiday leave in the North or in the vicinity of their employment and receive the same vacation entitlement for travel assistance as their fellow employees who decide to go to what is usually termed "outside". I understand negotiations have recently been completed which have developed a policy in this area. Can the administration make this public at this time?

DEPUTY COMMISSIONER PARKER: Mr. Chairman, it is true that negotiations have been completed. However, the employee organizations have not yet concluded their voting on the proposals that were agreed to with the executives and therefore, I am sorry that I can not at this time reveal the details of the plan. Suffice to say though that I do believe Council Members will be satisfied that we will have negotiated a position for those persons who wish to take their vacations in the North and it will be on as equitable a footing as possible as those who wish to take them in the South. I have taken this on as a personal task and I think I can give you a personal guarantee on that.

MR. BUTTERS: Thank you, Mr. Chairman. I understand then that the negotiated settlement or program would become effective during the holiday season beginning now, May and June? This summer or this fall?

DEPUTY COMMISSIONER PARKER: Yes, that is correct.



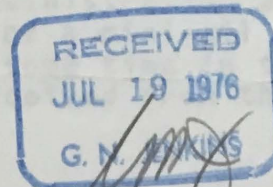
IMPERIAL OIL LIMITED

500 SIXTH AVENUE SOUTH WEST, CALGARY, ALBERTA T2P 0S1

R. HORSFIELD  
CORPORATE MANAGER - ARCTIC

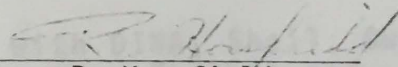
July 15, 1976

Messrs G. L. Haight  
Vince Sirois  
G. N. Jenkins ✓



For your information I am enclosing a copy of an Information Item from the N.W.T. Council Minutes concerning Norman Wells and the proposed Delta gas plants.

We know that DINA are in the process of doing a reservoir study of Norman Wells and making an analysis of the possible utilization of gas plant liquids.

  
R. Horsfield

RH:mm

Enclosure



IMPERIAL OIL LIMITED

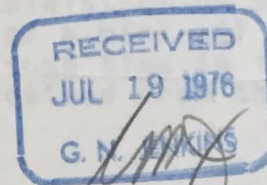
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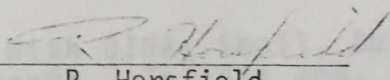
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Enclosure



RECEIVED

JUL 14 1976

4 May 1976

m

INFORMATION ITEM 4-59Mini-Oil Refinery

During the 58th session of Council the Administration was requested to investigate the possibility of a mini-oil refinery in the Northwest Territories at some time in the future. The following information was received from the Department of Economic Development.

"Through the Federal/Territorial Economic Planning Committee, the Department of Indian and Northern Affairs has been looking at the possibility of having a topping or fractionating plant to produce liquid gas (propane, diesel and perhaps aviation fuel) for N.W.T. needs.

This Administration indicated that the study should be a comprehensive energy supply-demand study. DINA was receptive to this suggestion and the subsequent terms of reference mentioned the possibility of a crude oil topping plant in the Delta area.

This was to be a joint study with DINA, Shell, Gulf, Imperial and NCPC as participants. To this end, DINA has been in contact with these companies. There has been some reluctance to undertake a joint study, particularly on the supply side, citing possible Anti-Combines action as a deterrent.

On the demand side, however, Gulf has expressed a great deal of interest in undertaking a look at the N.W.T. market potential for petroleum products. Indications are that Imperial would also be interested.



It makes little sense to examine the feasibility of a mini-oil refinery in isolation of other alternatives. In all likelihood, natural gas will be on stream before crude oil and the possibility of supplying the N.W.T. with products from this source (gas and liquids) will have a bearing on the need and desirability of producing crude oil products as well.

One of the aspects of this study must, obviously, be to examine the potential of the Norman Wells facility. The proven reserves are at present about 50 million barrels, but the potential may be many times this figure. At present production levels of less than 1 million barrels per year, even the proven reserves will have a lifetime of over 50 years. Expansion of the facilities at Norman Wells would seem to be a real possibility.

As to a timetable, the Administration will be recommending to DINA that a market demand study be started within the next two months and hopefully by this fall more will be known about the design and capacity of the gas plants so that the supply end can be examined."



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PROPRIETARY

MARKETING DEPARTMENT  
MANAGEMENT COMMITTEE  
TOPIC SUMMARY

(Items to be approved by Contact AGM and Topic Summary  
to be forwarded to Secretary two days prior to meeting)

DATE OF MEETING  
July 21, 1976

DATE PREPARED  
July 19, 1976

TOPIC:  
Eastern and Western Arctic

DIVISION  
Wholesale Operations

PRESENTATION AND  
DISCUSSION TIME (minutes)  
25 minutes

PURPOSE OF PRESENTATION

To review Marketing's activities in 1976 in the Eastern and Western Arctic regarding volume, pricing, profit, lease and contract negotiations.

RECOMMENDATIONS/CONCLUSIONS

RATIONALE FOR RECOMMENDATIONS AND CONCLUSIONS

Information item.

POSSIBLE RISKS AND/OR  
ADVERSE CONSEQUENCES



## **GUIDELINES FOR PREPARATION OF MANAGEMENT COMMITTEE TOPIC SUMMARY**

### **RECOMMENDATIONS AND CONCLUSIONS**

What do you expect from the Committee?

- i.e. — approval to take action
- endorsement of an action already taken
- reaction to a proposal being developed
- reaction to status report; information item

What is being recommended/concluded?

- for information items or status reports, what are the main conclusions, or observations?

\*Desired results and resource commitments?

- Results to be achieved (What, Where, When, How Much)
- Resource limits (Men, Money, Material, Time, Energy)

### **RATIONALE FOR RECOMMENDATIONS AND CONCLUSIONS**

- This section should stand on its own. Attachments should be the exception.
- The following should be included:

a) Fundamental basis underlying the recommendation/conclusion

- i.e. stems from a prior decision
- correct a problem situation
- meet a new or unfulfilled need
- capitalize on an opportunity
- minimize risk of a potential problem
- improve performance of an activity/group/unit

b) Key factors influencing the recommendation/conclusion

c) Logic leading to the recommendation/conclusion

### **\*POSSIBLE RISKS AND/OR ADVERSE CONSEQUENCES**

- What are the major threats to this recommendation/conclusion?
- What risks are we exposing ourselves to (including social, political)?
- What are the contingency plans?

### **\*COMMON AREAS FOR DESIRED RESULTS/RISKS/ADVERSE CONSEQUENCES**

#### **PEOPLE**

Motivation and attitudes  
Skills and abilities  
Performance and productivity  
Development and growth  
Health and safety

#### **ORGANIZATION**

Relationships among units,  
functions, persons  
Communications  
Responsibility and delegation  
Formal and informal organization  
Coordination

#### **IDEAS AND PROCESSES**

Security, proprietary position  
Adaptability

#### **MATERIAL**

Sources and availability  
Quality  
Handling and storage

#### **FACILITIES AND EQUIPMENT**

Space  
Flexibility and adaptability  
Location  
Compatibility

#### **MONEY**

Capital or fixed  
Costs and expenses  
Return  
Cash flow

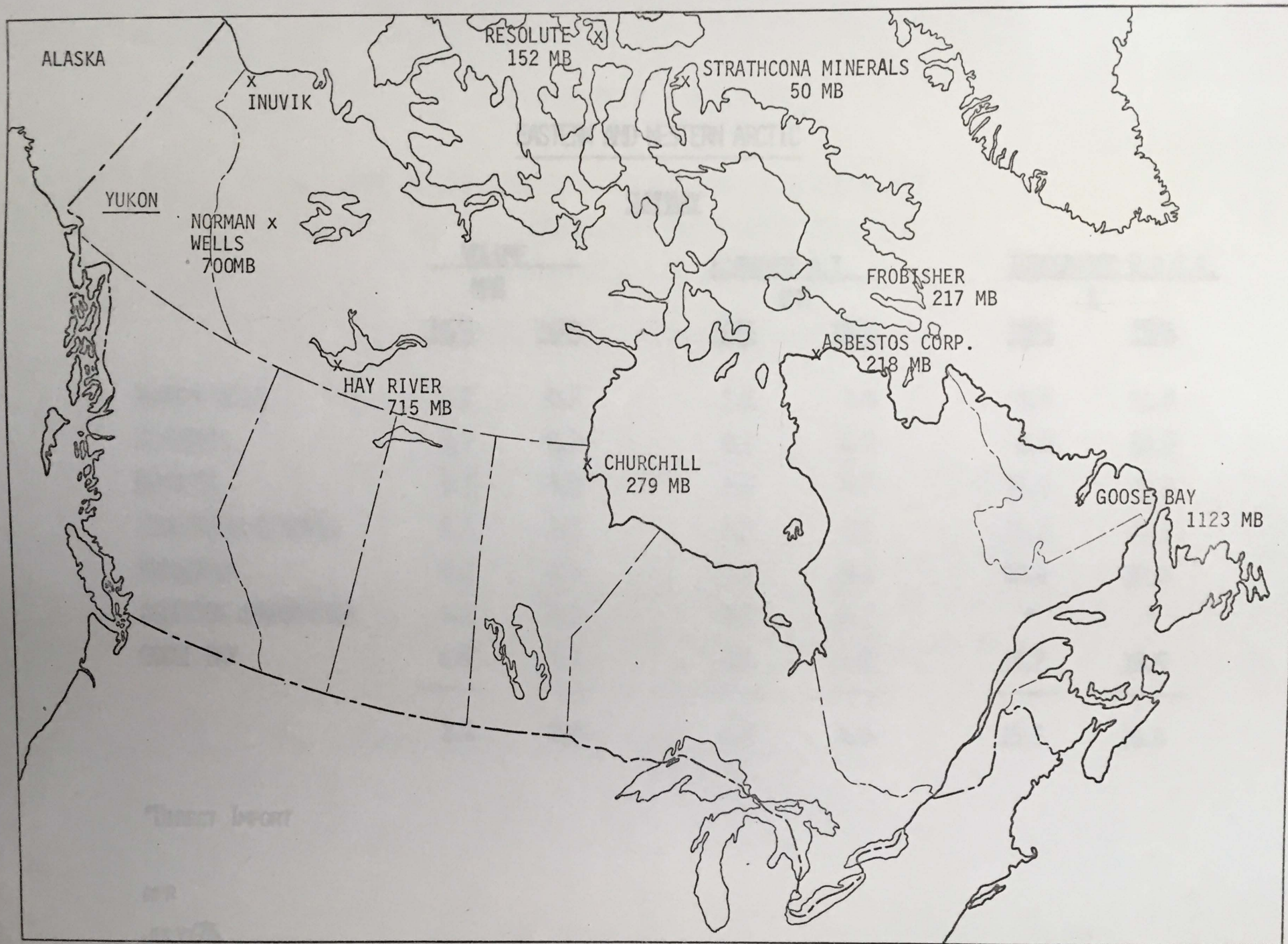
#### **OUTPUT**

Quality  
Quantity  
Pace and timing

#### **EXTERNAL INFLUENCES**

Economic trends  
Competition  
Company image  
Political, social, legal







# EASTERN AND WESTERN ARCTIC

## SUMMARY

	<u>VOLUME</u>		<u>EARNINGS A.T.</u>		<u>INTEGRATED R.O.C.E.</u>	
	<u>MMB</u>		<u>\$MM</u>		<u>%</u>	
	<u>1975</u>	<u>1976</u>	<u>1975</u>	<u>1976</u>	<u>1975</u>	<u>1976</u>
NORMAN WELLS	0.7	0.7	1.1	1.4	9.5	11.0
CHURCHILL	0.2	0.3	0.1	0.2	8.0	10.2
RESOLUTE	0.3	0.2	1.2	0.7	25.2	20.2
STRATHCONA MINERALS	0.1	0.1	0.1	0.1	22.2	22.2
FROBISHER	0.2	0.2	0.4	0.4	32.4	32.4
ASBESTOS CORPORATION	0.2	0.2	0.1	0.1	*	*
GOOSE BAY	0.6	1.1	0.8	1.9	15.7	16.5
	<u>2.2</u>	<u>2.8</u>	<u>3.9</u>	<u>4.9</u>	<u>15.5</u>	<u>16.4</u>

\*DIRECT IMPORT

RFR

JULY/76



WESTERN ARCTIC - NORMAN WELLS

- 1976 PRICING STRATEGY - REQUEST SAME INCREASES AS 1975
  - UNCERTAINTY 1980 EDMONTON CRUDE PRICE
  - POSSIBLE A.I.B. INTERVENTION
- D.I.A.N.D. APPROVED REQUESTED PRICE INCREASES JUNE 15
- NO A.I.B. INTERVENTION
- IMPLEMENTED PRICE INCREASES JUNE 17 - RETROACTIVE TO JUNE 1 ON BARGE SALES
  - 4¢ PER GAL. "SMALL CONSUMERS" AND GOVERNMENT PLUS BARGE RATE INCREASE TO INUVIK AND AKLAVIK
  - 6.0 TO 12.7¢ PER GAL. TO OTHERS DEPENDING ON PRODUCT AND LOCATION.
- REVENUE INCREASE \$1.5MM: 6¢ PER GALLON



WESTERN ARCTIC - NORMAN WELLS

	<u>NORMAN WELLS CRUDE PRICE</u>	<u>EARNING A.T.</u>	<u>R.O.C.E.</u>
1974	\$3.22/RBL	\$0.7MM	7%
1975	4.51	1.1	9.5
1976 FORECAST	6.00	1.4	11.0
1980 FORECAST	13.50	3.0	13.0

RFR  
JULY/76



WESTERN ARCTIC - NORMAN WELLS

100 MB H.F.O. TANK

- APPROPRIATED \$2345 M CAPITAL; \$150 M EXPENSE
- FOUNDATION TO BE COMPLETED SUMMER 1976
- TANK CONSTRUCTION SCHEDULE FOR SEPT. 1977 COMPLETION
- CONTRACT SIGNED WITH N.C.P.C.
  - GUARANTEE TO BUY 1.3 MMB 1976 TO 82 INCLUSIVE
  - OR CONTRACT CARRIES ON UNTIL THEY PURCHASE THIS VOLUME
- H.F.O. FLARED

1975	230 MB
1982 FORECAST	130 MB

RFR

JULY/76



WESTERN ARCTIC

SOUTH OF NORMAN WELLS

- APRIL 20 NON-CRUDE PRICE INCREASE 2.9 to 3.4 ¢/GAL.

- ALLOWANCES IN PLACE FOR:

- - CONSUMER
- - AUTOMOTIVE
- - INDUSTRIAL ACCOUNTS WHO BUY AT POSTED PRICE

- D.P.W. WILL RECOVER EXPENDITURE BY CHARGING A 3¢/GAL. RENTAL FEE.

- RENTAL FEE WILL APPLY ONLY TO GOVERNMENT VOLUME AND IS ADDED TO GOVERNMENT PRODUCT PRICES.

RFR

JULY/76



CHURCHILL, MANITOBA

- IOL RETAINED BY TENDER 5-YEAR CONTRACT TO OPERATE GOVERNMENT FACILITIES AND SUPPLY GOVERNMENT PETROLEUM REQUIREMENTS.
- VOLUME
  - 202 MB GOVERNMENT
  - 77 MB NON-GOVERNMENT
- VOLUME INCREASE 76 VS 75: 38 MB
- GOVERNMENT WILL SPEND \$1MM TO IMPROVE FACILITY - ENVIRONMENTAL AND SAFETY.
- D.P.W. WILL RECOVER EXPENDITURE BY CHARGING A 3¢/GAL. RENTAL FEE.
- RENTAL FEE WILL APPLY ONLY TO GOVERNMENT VOLUME AND IS ADDED TO GOVERNMENT PRODUCT PRICES.



EASTERN ARCTIC  
CHURCHILL, MANITOBA

	<u>VOLUME</u> <u>MB</u>	<u>EARNINGS A.T.</u> <u>\$M</u>	<u>R.O.C.E.</u> <u>%</u>
1974/75	300	106	6.3
1975/76	241	141	8.0
1976/77 FORECAST	279	192	10.2

RFR  
 JULY/76



EASTERN ARCTIC

RESOLUTE

- NEGOTIATED 16-MONTH LEASE EXTENSION TO AUGUST 31, 1977.
- GOVERNMENT WILL GO TO TENDER THIS FALL FOR CONTRACT COMMENCING SEPT. 1, 1977.
- TENDER TIMING IS GOOD AS RESOLUTE VOLUME OUTLOOK CURRENTLY IS BLEAK.

	<u>VOLUME</u>	<u>EARNINGS A.T.</u>	<u>R.O.C.E.</u>
	MB	\$M	%
1975/76	250	1227	25.2
1976/77 FORECAST	152	659	20.2

RFR

JULY/76



## EASTERN ARCTIC

### FROBISHER BAY

- 10-YEAR LEASE EXPIRES 1978
- SINGLE CARGO IMPORT

	<u>VOLUME</u>	<u>EARNINGS A.T.</u>	<u>R.O.C.E.</u>
	MB	\$M	%
1975/76	197	410	32.4
1976/77 FORECAST	217	450	32.4

### ASBESTOS CORPORATION - DECEPTION BAY

- RETAINED
- VOLUME 218 MB: INCREASE 63 MB OVER 1975
- IMPORT
- MARGIN \$1.00 PER BBL.

RFR

JULY/76



EASTERN ARCTIC

STRATHCONA MINERALS

- RETAINED
- VOLUME 50 MB: SAME AS 1975
- DOMESTIC SUPPLY
- FORECAST SAME PROFIT A.T. AS LAST YEAR: \$136 M  
: 22% R.O.C.E.

RFR  
JULY/76



ATED 2-YEAR LEASE EXTENSION TO JUNE 30, 1978.

USAF PULLING OUT IN 1976.

IOL WILL OPERATE FORMER USAF TANK FARM.

- IOL WILL WORK WITH M.O.T. FOR ORGANIZED CLOSE-OUT OF CANADIAN GOVERNMENT TANK FARM.
- D.S.S. HAVE ACCEPTED OUR BASIS OF PRICING FOR PRODUCT FORMERLY SUPPLIED BY USAF.

DIESEL P-40  
MOGAS  
TURBO B

MB

343  
3  
23

- TENDER SUBMITTED TO USAF FOR THEIR REQUIREMENTS.

TURBO B

MB

- OPERATING  
- RESERVE

167  
162

RFR

JULY/76



GOOSE BAY, LABRADOR

	<u>VOLUME</u> MB	<u>EARNINGS A.T.</u> \$M	<u>R.O.C.E.</u> %
1975/76	587	768	15.7
1976/77 FORECAST	1123	1943	16.5

NOTE:

INTEGRATED RETURN.

RFR  
JULY/76



# MEMORANDUM

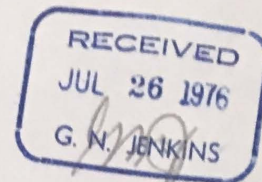
1 copy (circulate) J.A. Stewart  
R.F. Roblin  
July 26/76 GNJ/pa

*Arctic Review Comm. File*  
LOGISTICS DEPARTMENT

July 26, 1976

Norman Wells/Taglu

File: 530.01-9



Mr. V. Sirois  
DEPARTMENT

This memorandum will record agreements reached today at our meeting with Messrs. G. L. Haight and B.T. Reilly of Production Department.

1. On Norman Wells, the next step in our studies is to develop a future reservoir production strategy. To assist Production Department in this study, Development Division is to provide Bernie Reilly with crude values which result from the current product price scenario, and also crude values from other reasonable scenarios.

We discussed having the reservoir study completed at two levels of production -- firstly, to indicate what must be done to sustain production at current levels, and secondly, what must be done to increase production substantially beyond this level.

To assist in the reservoir studies, Development Division is to gather whatever crude gravity history we have. In particular, gravity data which indicates trends for crude produced on the mainland versus crude produced on the islands would be helpful.

It was also agreed that Production would develop with CAGPL the opportunity to have CAGPL fuel one or two compressor stations nearest to Norman Wells with Heavy Fuel Oil and Naphtha from the Norman Wells operation. Production Department will have Marketing Department involvement in this development.

2. Production Department are following up on the suggestion that CAGPL compressor stations and the N.C.P.C. Inuvik power station demands would be attractive outlets for Taglu Condensate. These opportunities will be followed up to determine feasibility and economics prior to any further work being done on the question of producing fuels products from Taglu Condensate for the MacKenzie Delta market.

GHT/jt

cc: Mr. G. L. Haight  
Mr. B. T. Reilly  
Mr. G. N. Jenkins  
Mr. R. S. Vincent  
Mr. K. W. Briggs

*G. H. Thomson*  
G. H. THOMSON



July 28/76

Mr. Jenkins:

Ken Proudfoot is putting the Arctic Sales item on the PPMG agenda for Aug. 25 (max. 1/2 hour) The S.P.C. 6+6 lube review is the same day and a max. of 1/2 hour is being allowed for it. Have advised Bob Roblin of the new date.

P.A.

DEPARTM

1976

Arctic Sal  
ation shoul

roudfoot, a  
for Septemb  
ou on this  
rmed or cha

gomery



✓ 1/2 3 hrs  
mtg 30 min

met at PPMG  
after Sept. 7  
Sept. 29th

✓ 297

i ✓

Aug 25th

2 hrs. of 40  
+ SPC (1/2 hr).

Aug 9  
Haynes  
164  
away



# MEMORANDUM

MARKETING DEPARTMENT

PPM 6  
Sept 7

July 26, 1976

Changed to  
Aug 25

→ Mr. G.N. Jenkins,  
Room 1836.

J M B &  
RFR  
advised

Following Mr. Roblin's review of 1976 Arctic Sales at M.M.C. on July 21, it was agreed that the presentation should be made at P.P.M.G.

The Secretary of P.P.M.G., Mr. K.M. Proudfoot, advises that this item could be included on the agenda for September 7th. I have tentatively reserved 30 minutes for you on this date. Would you please arrange to have this date confirmed or changed as desired.



R.D. Montgomery

2223

RDM/gh

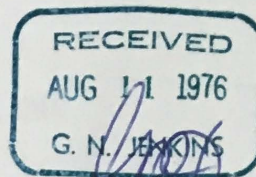
c.c. - Messrs K.M. Proudfoot - 496  
R.F. Roblin  
J.M. Bedard



# MEMORANDUM

MARKETING DEPARTMENT

August 10, 1976



Taglu Gas Plant  
Condensate

Messrs. H.B. McGonigal  
C.E. Overturf  
B.T. Reilly  
L.C. Sevic  
G.H. Thomson

Attached is a letter Mr. R. Horsfield received from Indian & Northern Affairs regarding the disposition of condensate from the Taglu Gas Plant.

R.F. ROBLIN  
Secretary.  
Arctic Review Committee

RFR/ldl

cc: G.N. Jenkins ✓  
G.A. Fullerton, Edmonton  
C.E. Langston, Ottawa





Indian and  
Northern Affairs

Affaires indiennes  
et du Nord

RECEIVED

JUL 29 1976

M

RECEIVED

AUG 9 1976

G. N. JENKINS

OTTAWA, Ontario K1A 0H4

July 22, 1976

Your file    Votre référence

Our file    Notre référence    N-4730-104

Mr. R. Horsfield,  
Corporate Manager - Arctic,  
Imperial Oil Limited,  
500 - 6th Avenue S.W.,  
CALGARY, Alberta.

*Collier*

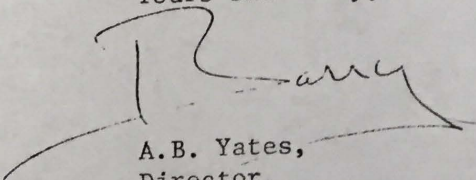
Dear Mr. Horsfield:

Subsequent to our meetings with you on the Taglu gas plant, we decided to go ahead with a study of the potential uses of natural gas liquids as an alternate energy supply in the Mackenzie River region. We are now proceeding with the study on a joint basis with Gulf Oil Canada Limited. Selection of a consultant should be completed by early August and the completion date has been set at the end of October, 1976.

We are counting on your co-operation in providing relevant data on the Taglu plant as the study proceeds. Would you please let me know whether you would prefer to have the consultant contact you directly or whether you would prefer to provide data to us for use by the consultant.

During our meetings, you indicated that the results of some of your current studies could be made available to us in formal report form later this summer. I am looking forward to receiving these reports as they are completed.

Yours sincerely,

  
A.B. Yates,  
Director,  
Northern Policy and  
Program Planning Branch,  
(Northern Affairs Program).



# MEMORANDUM

MARKETING DEPARTMENT

August 16, 1976

RECEIVED  
AUG 16 1976

G. N. JENKINS

Natural Gas Sales to  
Gov't. N.W.T.  
Norman Wells

Messrs. G.N. Jenkins ✓  
H.B. McGonigal  
C.E. Overturf  
L.C. Sevick  
G.H. Thomson  
B.T. Reilly

The attached correspondence is for your information.

Regarding Section 92 of Order in Council P.C. 5059 June 30, 1944, it is our Law Department's opinion (Mr. J.M. Koshan) that IOL do not have to request approval from the Minister of Indian & Northern Affairs for increases in natural gas prices at Norman Wells. Section 95 of P.C. 5059 is excluded in the Norman Wells Agreement of June 21, 1944.

I will keep you advised on the outcome of discussions with D.I.A.N.D. on this issue.

R.F. ROBLIN  
Secretary  
Arctic Review Committee

RFR/ldl

cc: R. Horsfield, Calgary  
C.E. Langston, Ottawa  
G.A. Fullerton, Edmonton  
I.K.A. Campbell  
J.M. Koshan



# MEMORANDUM

CRUDE AND LIGHT HYDROCARBON SALES DEPARTMENT

August 11, 1976.

Gas Sales Contract  
Government of NWT - IOL  
Norman Wells

Mr. L. C. Sevick

Mr. Robb Marshall (head of the Production and Royalty Unit in the Natural Resources Division in Ottawa) queried Mr. Claire Langston of Imperial as to why Imperial Oil did not obtain approval from the Minister of Indian Affairs and Northern Development for the recent increase in natural gas selling price at Norman Wells.

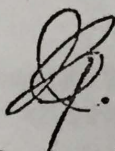
Mr. Marshall referenced the "Order in Council 5059" dated June 30, 1944 as the document giving the Minister the authority to approve any price revisions in the N.W.T.

The writer in reviewing P.C. 5059 concluded that although natural gas (per se) is highlighted throughout the document in conjunction with petroleum products there is no mention of natural gas in Section 92 which deals with price - namely

"The lessee from time to time on instruction of the Minister submit a schedule of rates and prices which the lessee is charging for petroleum products obtained etc ..."

However, Section 95 deals with additional regulations which the Minister may add from time to time if he deems it necessary for the interpretation and effective administration of these regulations. Under this section the Minister may have the authority to add natural gas under the pricing regulations.

In subsequent discussion with R. F. Roblin - he feels natural gas pricing falls outside of this Order in Council and should remain so. Bob plans on discussing the subject on this basis with government officials and will advise us of the outcome.

  
I. K. A. Campbell

kf

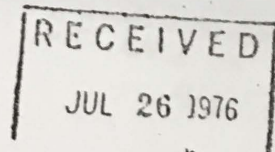
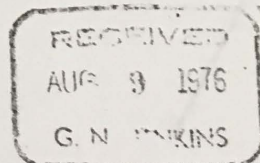
cc: Mr. R. F. Roblin

WNL FUEL PRODUCTS SECTION			
AUG 13 1976			
	CIRC.	COPY	ACTION
GNJ			
JMB			
RFR	/		
JPI			
ICM			





FILE 82 000 500 Aug. 10/76

GOVERNMENT OF THE NORTHWEST TERRITORIES  
CANADAInuvik, N.W.T.  
9 June 1976

Dear Customer:

Imperial Oil Limited has announced that 1st April 1976 the price of natural gas delivered to the Government of the N.W.T. in Norman Wells would be increased to 75¢ per mcf. To assist in defraying some of the administrative costs such as reading of meters, invoicing and carrying out repairs, the Government of the N.W.T. have added a further increase of 10¢ per mcf, therefore, natural gas supplied by the Government of the N.W.T. to customers in Norman Wells will be increased to 85¢ per mcf, effective 1st April 1976.

The Government of the N.W.T. propose to carry out an upgrading program on the gas line this summer and if possible, extend the line into the new sub-division. Hopefully, with the upgrading and extension all residents in Norman Wells who are not at present hooked up to the gas line and are interested in receiving natural gas, will have the opportunity to receive this service. I would also like to point out that we may find it necessary to make a further adjustment in the price of natural gas when the upgrading of the system is completed.

On behalf of the Government of the N.W.T. I want to assure you we regret having to announce this increase, however, we feel we have no alternative.

Yours truly,

  
I. C. Stewart  
Regional Director./cd  
c.c. Finance Office.



4/12/76 LDL

## MEMORANDUM

CRUDE AND LIGHT HYDROCARBON SALES DEPARTMENT

April 9, 1976.

NORMAN WELLS GAS SALES CONTRACT

File: 06-N.W.T.-00-00

Mr. J. G. Livingstone

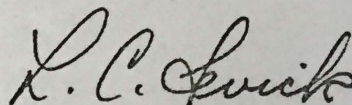
Imperial Oil Limited has an annual contract to sell natural gas (about 200 Mcf/d) to the Government of the Northwest Territories at Norman Wells. The current contract, providing for a price of 60¢/Mcf, expired March 31, 1976.

Originally, we had intended approaching the government's representative at Norman Wells with a pricing proposal for 1976/77 of 75¢/Mcf, based on TransCanada's current Alberta field price (excluding border flowback); however, Mr. Horsfield, Arctic Corporate Manager, expressed concern about using this pricing rationale because of recent adverse public reaction to proposed price increases for utility services in the Northwest Territories.

Consequently, we have adopted a revised pricing rationale for Norman Wells gas sales which might be more acceptable to the consumer. Rather than using TransCanada Pipelines' Alberta field price, we propose that the Norman Wells gas price be tied to the Norman Wells crude oil realization. Imperial and the Government agreed in July, 1975, that petroleum product prices at Norman Wells will be increased each year such that the imputed Norman Wells crude realization will phase-in to the Edmonton crude price, less \$1.50/barrel, in 1980. We propose that the price of natural gas phase-in to Btu parity with Norman Wells crude in 1981. Because of the difficulty in establishing the imputed price of Norman Wells crude on April 1 of any year, the phase-in can be more easily accomplished by utilizing the Edmonton crude price, less \$1.50/barrel.

We have proposed a price of 75¢/Mcf for natural gas sales for the period April 1, 1976 to March 31, 1977. This is equivalent to 65% of the Btu value of Edmonton crude, less \$1.50/barrel. It also corresponds to the current Alberta field price for natural gas. In terms of reaching Btu parity by April 1, 1981, we propose increasing the percentage of parity by 5%/year, starting from the current 65%.

So far, we have not heard of the reaction to our proposal.



L. C. Sevick

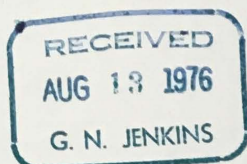
kf

cc: NRMC Members  
Arctic Review Committee Members  
Mr. R. Horsfield  
Mr. L. F. Wolfe



# MEMORANDUM

CRUDE AND LIGHT HYDROCARBON SALES DEPARTMENT



August 12, 1976.

Arctic Review Committee Members:

Mr. G. N. Jenkins  
Mr. C. E. Overturf  
Mr. G. H. Thomson  
Mr. R. G. Wilson  
Mr. R. F. Roblin

Attached is a copy of a letter sent by the Regional Director of the Government of the Northwest Territories to natural gas customers at Norman Wells. The copy of the letter was provided by Mr. A. B. Lorentz, Northwest Territories' Refinery Superintendent.

The tone of the letter is disturbing since the opening line suggests that Imperial dictates the price of natural gas. It appears that the Regional Director does not appreciate that the contract we forwarded was our proposal and that he agreed to it. It was not simply a matter of Imperial announcing what the price would be.

L. C. Sevvick

kf  
Attachment



GOVERNMENT OF THE NORTHWEST TERRITORIES  
CANADA

C & L H SALES	
NATURAL GAS	
JUL 26 1976	
LFW	✓
RDK	✓
RNS	✓
ERW	✓
FILE 01-40-02	

Inuvik, N.W.T.  
9 June 1976

Dear Customer:

Imperial Oil Limited has announced that 1st April 1976 the price of natural gas delivered to the Government of the N.W.T. in Norman Wells would be increased to 75¢ per mcf. To assist in defraying some of the administrative costs such as reading of meters, invoicing and carrying out repairs, the Government of the N.W.T. have added a further increase of 10¢ per mcf, therefore, natural gas supplied by the Government of the N.W.T. to customers in Norman Wells will be increased to 85¢ per mcf, effective 1st April 1976.

The Government of the N.W.T. propose to carry out an upgrading program on the gas line this summer and if possible, extend the line into the new sub-division. Hopefully, with the upgrading and extension all residents in Norman Wells who are not at present hooked up to the gas line and are interested in receiving natural gas, will have the opportunity to receive this service. I would also like to point out that we may find it necessary to make a further adjustment in the price of natural gas when the upgrading of the system is completed.

On behalf of the Government of the N.W.T. I want to assure you we regret having to announce this increase, however, we feel we have no alternative.

Yours truly,

*I. C. Stewart*  
I. C. Stewart  
Regional Director.

/cd  
c.c. Finance Office.





FJ

# IMPERIAL OIL LIMITED

## MARKETING DEPARTMENT

Vice President & General Manager  
WILLIAM A. WEST

Assistant General Managers  
CHARLES A. HAYLES  
GEORGE N. JENKINS  
GEORGE R. WISENER

111 St. Clair Avenue West, Toronto, Canada M5W 1K3

August 26, 1976

Mr. A.W. Wirth  
General Manager  
Engineering & Construction  
Canadian Arctic Gas Study Limited  
1270 Calgary House  
550 - 6th Avenue, S.W.  
Calgary, Alta.  
T2P OS2

Dear Art:

I hope you enjoyed your vacation and that the shock of returning to work is not too great! I called yesterday, hoping to discuss briefly the possibility of getting together with you in the near future to explore the range of services Imperial might provide in connection with the supply of petroleum products for your project.

First, let me clear up any confusion that might exist regarding our organization and why I'm the one contacting you. We are currently in the middle of a changeover with respect to the senior management of our Marketing Department. Tom Thomson has taken over from Bill West as Vice-President & General Manager and Dick Grout has replaced George Jenkins as Assistant General Manager responsible for our Wholesale Division (effective September 1st). As part of this reorganization the Distribution group has been moved back into Marketing and will be the responsibility of Don Penrose as an Assistant General Manager of Marketing. This was done, in part, so that we could provide a better integrated service for our customers (e.g., CAGPL), particularly in the planning stages.

Until fairly recently I was also an Assistant General Manager of Marketing, responsible for Marketing Services and coordination with other departments. As such, I became involved with the planning to serve the market opportunity represented by your Pipeline project. I'm currently on a special project reporting to Jim Livingstone. As part of this activity I'm exploring the possibility of expanding our distribution services beyond just the handling of petroleum products.



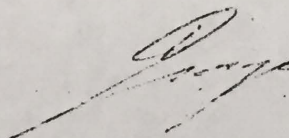
August 26, 1976

My interest in meeting with you then is twofold - from a purely Marketing point of view I will be representing our senior management during the current changeover and, secondly, I have an interest in exploring your needs from a broader perspective. Sorry to be so long-winded but I thought I should clarify the situation.

It would not be my intent to get into much detail at a preliminary meeting but rather I would like to explore the possibilities with you from a conceptual point of view. I would like to involve Jack Stewart, the project leader from our end, and possibly Gerry Fullerton, our manager of Industrial sales in Western Canada. I realize you're a very busy man these days but I would appreciate an hour or so of your time. I can arrange to meet whenever (and wherever) it is convenient for you.

I will call your office early next week to confirm arrangements.

Yours very truly,



G.R. Wisener/kr

b.c.c. Mr. T.H. Thomson  
Mr. R.S. Grout  
Mr. D.M. Penrose  
Mr. J.M. Bedard  
Mr. J.A. Stewart  
Mr. G.A. Fullerton

Mr. J.G. Livingstone  
Mr. J.H. Hamlin  
Mr. A.R. Haynes  
Mr. J.C. Underhill



JMB.

copy sent to JMB  
Sept. 3/76  
ir



I M P E R I A L O I L L I M I T E D

MARKETING DEPARTMENT

Vice-President & General Manager  
THOMAS H. THOMSON

111 St. Clair Avenue West, Toronto, Canada M5W 1K3

September 2, 1976,

Mr. A.W. Wirth  
General Manager  
Engineering & Construction  
Canadian Arctic Gas Study Limited  
1270 Calgary House  
550 - 6th Avenue, S.W.  
Calgary, Alberta  
T2P 0S2.

Dear Art:

Just a note to confirm our meeting on September 14 in  
Calgary. Both Gerry Fullerton and Jack Stewart will be with me,

If you have the time maybe you'd like to join us for  
lunch. I'll check with your office in the morning to make specific  
arrangements,

Yours very truly,

G.R. Wisener:ir

ccb. Mr. T.H. Thomson  
Mr. R.S. Grout  
Mr. D.M. Penrose  
Mr. J.A. Stewart  
Mr. G.A. Fullerton

A handwritten signature, likely of G.R. Wisener, written in ink.



Date September 27/76

To: MR. J. M. BEDARD - Room 1851

From: **R.S. GROUT**

MEMORANDUM

Re: G.R. Wisener's letter of Sept. 16/76  
on CAGSL

Mr. T. H. Thomson

Let's discuss. I am a little

concerned re. statement in Para. 2

page 1 re availability of low pour.

Have Logistics looked at it and

do they have a plan?

Up to this point the problem has been in providing about 900,000 barrels of capacity beyond this level. The question of how best to meet a personal preference for low pour diesel.

Attachment:

*Discussed with JMB - file*

We are working with the refinery. They indicated a need for product will likely lie between 100,000 and before this is met, it will be lower than we had anticipated.

We also have a better understanding of the Canadian requirements.

They will be moving some product by sea from the West to supply the American section and could move a portion of the total requirement through Skagway and up the new Dempster Highway. However, the odds on the latter movement are relative

DEPARTMENT

September 16, 1976

GSL

and I had quite a discussion with Art Wirth and Jerry regarding the supply of product for providing a service. The attachment

indicated an understanding of requirements that we like to see of course left to the bidder. The ability to provide a way towards understanding that which has a high level of the low pour

?

recast that side. In the final. The final is although it will

to our original on a basis

the Canadian requirements

supplied from the Edmo

from the West

and could move a portion

total requirement through Skagway and up the new Dempster

However, the odds on the latter movement are relative



# MEMORANDUM

MARKETING DEPARTMENT

September 16, 1976

PROPRIETARY

CAGSL

Mr. T. H. Thomson  
Room 1830

Gerry Fullerton, Jack Stewart and I had quite a successful meeting with CAGSL this week. Art Wirth was there together with a number of his staff including Jerry Dunn, their Manager of Logistics. Beyond the supply of petroleum products we discussed the possibility of providing a range of services. I have summarized these in the attachment to this memorandum.

Up to this point we have only indicated an interest in providing about 50% of the petroleum requirements FOB Edmonton Refinery. I indicated to them that we likely had capacity beyond this level, however, I of course left open the question of how much we would actually bid on. Art had a personal problem with the Industry's ability to provide the low pour diesel. I think we went a long way towards relieving his mind in this regard. It is my understanding that with the Pacific Petroleum Process Agreement, which has a high mogas distillate ratio, we could provide 100% of the low pour requirement with minor expansion steps. ?

We discovered that the volume forecast that we had been working with was definitely on the high side. In their application they indicated a need at 60% of this level. The final requirement will likely lie between these two extremes although it may be year end before this is confirmed. In any case, it will be significantly lower than we had anticipated.

We also discovered that contrary to our original understanding they are currently planning on a basis of 100% of the Canadian requirement being supplied from the Edmonton area. They will be moving some product by sea from the West Coast to supply the American section and could move a portion of their total requirement through Skagway and up the new Dempster highway. However, the odds on the latter movement are relatively slim. They also indicated that they did not want to depend entirely upon Hay River as a staging point for the river traffic. They are planning to provide at least stand-by capacity at two other locations: Fort Simpson and Axe Point. As much as 50% of the total could move through these latter two points.



Ideally they would like the Petroleum Companies to form a consortium to handle the supply and distribution of products all the way to the job site. I didn't show much enthusiasm for this approach particularly prior to supply contracts being finalized. One solution would be for them to call tenders and take title to the product FOB refineries and arrange for transportation, terminalling, and loading separately. I would suggest that we hold back on any recommendation until we understand our own situation. We may wish to bid on 100% of the volume delivered into barge at the staging points. This would be simpler from their point of view however they would still have an in-house political problem; e.g. other owners-refiners.

They have a definite need for some help in connection with their lubricant requirement for the job. Gerry Fullerton feels that we could help with development of specifications and volume forecasts during the planning stages. We might also provide some expertise in connection with training and product handling during construction. In this situation, as with any other service we might provide, we would charge on a separate basis. The Pipeline people don't want to get themselves in a position where they are obligated to a particular supplier nor do we want to count on being "rewarded" for our services.

We also explored the possibility of providing warehousing services on a much broader basis. This could include the building and operating of warehouses at the staging points (including a very large requirement at Edmonton) and the ten or so base camp sites. Inventory systems will also be required to back up this operation. The appeal here is that this could provide a starting point for a public warehousing business centered in a growth area, e.g. Western Canada. I will take the lead on this opportunity and develop it further with Atlas and our Production people in Edmonton.

I would suggest that we all get together relatively quickly to settle the question of responsibility for further development. I have made some general recommendations in the attachment. CAGSL are expecting a letter from us outlining the areas that we are prepared to develop further. They will then let us know when it will be appropriate to begin serious discussions. We should also make a similar contact with Foothills Pipeline at an early date.

COPY ORIGINAL  
SIGNED G. R. WISENER

/sr

G. R. Wisener

cc: Messrs. G. A. Fullerton  
R. S. Grout  
J. H. Hamlin  
J. G. Livingstone  
D. M. Penrose  
J. A. Stewart  
J. C. Underhill



# PROPRIETARY

## CANADIAN ARCTIC GAS OR FOOTHILLS PIPELINE PROJECT

<u>OPPORTUNITY</u>	<u>RANGE OF GOODS/SERVICES</u>	<u>LOCATION</u>	<u>RESPONSIBILITY FOR DEVELOPMENT</u>
<u>A. PETROLEUM PRODUCTS</u>			
SUPPLY	FUELS & SPECIALTIES	FOB REFINERY OR BARGE	WHOLESALE DIVISION (C.O.)
STORAGE & HANDLING	BUILD AND/OR OPERATE	STAGING SITES AND/OR BASE CAMPS	DISTRIBUTION DIVISION
SUPPLY MANAGEMENT	ARRANGE TRANSPORTATIONS MANAGE INVENTORY	REFINERY GATE TO STAGING SITE, BARGE OR BASE CAMP	DISTRIBUTION DIVISION
LUBRICANTS	SPECIFICATIONS VOLUME FORECAST APPLICATION	PLANNING PHASE - CALGARY OPERATIONS - JOB SITE	PRAIRIE INDUSTRIAL SALES
<u>B. OTHER</u>			
WAREHOUSING	BUILD AND/OR OPERATE	STAGING AREAS AND/OR BASE CAMPS	ATLAS AND/OR PRODUCTION DEPT.
INVENTORY SYSTEMS	SYSTEM DESIGN AND/OR COMPUTER SERVICES	TOTAL PROJECT	S. & C.S. BUT TIED CLOSELY TO WAREHOUSING

G. R. Wisener/sr  
September 16, 1976





# IMPERIAL OIL LIMITED

## MARKETING DEPARTMENT

Vice-President & General Manager  
THOMAS H. THOMSON

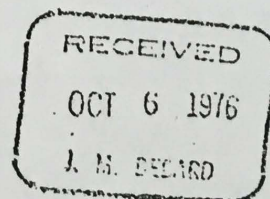
Assistant General Managers  
RICHARD S. GROUT  
CHARLES A. HAYLES  
DONALD M. PENROSE

111 St. Clair Avenue West, Toronto, Canada M5W 1K3

PROPRIETARY

October 4, 1976

Mr. A.W. Wirth  
General Manager  
Engineering & Construction  
Canadian Arctic Gas Study Limited  
1270 Calgary House  
550 - 6th Avenue, S.W.  
Calgary, Alta.  
T2P 0S2



Dear Art:

Since our meeting in Calgary I have had a number of discussions with the appropriate people within our Company regarding the supply and distribution of petroleum products for your pipeline project.

The Marketing Department have appointed a task force and would be prepared to sit down with you at your convenience to discuss the details of your requirements. We feel that we have the experience to offer a "complete package" including the supply of both fuel products and specialties, the construction and operation of facilities at the staging points and possibly the operation of the fuel facilities at your base camps. We may also be able to help during the planning phase, particularly in the area of lubricants.

Your main contact with us will continue to be through Gerry Fullerton's office in Edmonton. However, if the need develops we will have someone at the working level resident in Calgary to ensure good communications between us. My own personal involvement will, for all practical purposes, cease at this point and Dick Grout will assume overall General Management responsibility for the project here in Toronto.

During our meeting you may recall we discussed the possibility of providing an overall warehousing service for your project. As you know, we have been moving a wide range of materials into the North for some years now, and as a consequence have built up a capability both in terms of people and systems. I discussed the situation with Bob Teskey, our manager of Production Department Field Services in Edmonton, and he



Date Oct. 7/76

To: MR. J. M. BEDARD, Room 1851

*Arctic Gas*

From: **R.S. GROUT**

What is story on low pour  
capability?

R.S.G.

Att: Ltr. from G.R. Wisener to  
A.W. Wirth, GAGSL. re. supply & dist.  
of pet. products for their pipeline  
project. dated Oct. 4/76

*discussed  
file*



MB/ What is story on low pour  
capability? Asy.



I M P E R I A L O I L L I M



MARKETING DEPARTMENT

Vice-President & General Manager  
THOMAS H. THOMSON

Assistant General Managers  
RICHARD S. GROUT  
CHARLES A. HAYLES  
DONALD M. PENROSE

111 St. Clair Avenue West, Toronto, Canada M5W 1K3

October 4, 1976

PROPRIETARY

Mr. A.W. Wirth  
General Manager  
Engineering & Construction  
Canadian Arctic Gas Study Limited  
1270 Calgary House  
550 - 6th Avenue, S.W.  
Calgary, Alta.  
T2P 0S2

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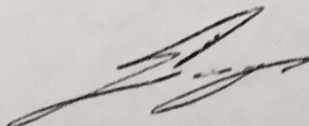
would be quite willing to explore the possibilities with your people if you so desired. We might be able to help during the planning stages and also operate at least a part of the system during construction.

I would suggest you contact Bob's office directly if you would like to explore this further. He can bring in our systems people (inventory management, etc.) as required. We will ensure that co-ordination is maintained internally between the Production and Marketing Departments as there is an obvious relationship to the storage and handling of petroleum products.

One final point, I'm sure you recognize the need for early resolution of the questions regarding the volumes of petroleum products that will be required. We will, no doubt, have to plan for a range; however, the "spread" at the present time makes it a bit awkward. In this regard I hope we satisfied your concern about the supply of low pour diesel. Even at the upper end of the scale we would still be able to supply a major portion of your total needs.

We look forward to working with you further.

Yours very truly,



G.R. Wisener/cp

b.c.c. Mr. T.H. Thomson	Mr. A.R. Haynes
Mr. R.S. Grout	Mr. J.C. Underhill
Mr. D.M. Penrose	Mr. G.L. Haight
Mr. J.M. Bedard	Mr. K.M. Kemp
Mr. J.A. Stewart	Mr. D.D. Baldwin
Mr. G.A. Fullerton	Mr. R.H. Teskey
Mr. J.G. Livingstone	Mr. L.W. Hutton
Mr. J.H. Hamlin	





Arctic Gas

# IMPERIAL OIL LIMITED

MARKETING DEPARTMENT

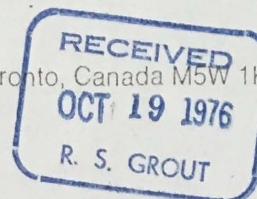
Vice-President & General Manager  
THOMAS H. THOMSON

Assistant General Managers  
RICHARD S. GROUT  
CHARLES A. HAYLES  
DONALD M. PENROSE

111 St. Clair Avenue West, Toronto, Canada M5W 1K3

October 19, 1976

CAGSL - Project  
Coordinating Group



Mr. G. A. Fullerton  
Mr. J. A. McGinnis  
Mr. J. R. Murdoch  
Mr. J. A. Stewart  
Mr. H. F. Yeomans

Dear Sirs:

This is to confirm that we will hold a meeting of the CAGSL Project Coordinating Group on Monday, October 25 at 9:00 am in conference room 1143-C (central office).

The purpose of this meeting is twofold:

- (1) to bring you up to date as to the progress that has been made
- (2) to reach agreement as to completion date and to broadly outline the major steps necessary to get there.

Jerry Fullerton will make a presentation dealing with the situation as seen from a field point of view, and it should provide us with sufficient background and recommendations so as to have a successful meeting.

It is expected the meeting will last approximately three hours.

Yours very truly,

J. M. BÉDARD  
WHOLESALE  
OPERATIONS MANAGER

JMB/sb

cc: Mr. R. S. Grout  
Mr. R. F. Roblin



Discus JMB

LOCATION 111 St. Clair Ave. West DATE October 25, 1976

MINUTES OF MEETING OF CAGSL - PROJECT COORDINATING GROUP

PLACE OF MEETING Room 1143-C

MEETING COMMENCED AT: 9:00 a.m. MEETING ADJOURNED AT: 12:00 p.m.

MEETING ATTENDED BY:

Mr. J.M. Bedard  
Mr. G.A. Fullerton  
Mr. J.A. McGinnis  
Mr. J.R. Murdock  
Mr. J.A. Stewart  
Mr. H.F. Yeomans

RECEIVED

OCT 27 1976

- R. S. GROUT

CHAIRMAN:

Mr. J.M. Bedard


SECRETARY:

K.M. Hubley

SUBJECT	MINUTES
OPENING REMARKS	Mr. J.M. Bedard opened the meeting and outlined the meeting objectives.  1) to bring the members up-to-date as to the progress that has been made.  2) to reach agreement as to the completion date, and to broadly outline the major steps necessary to get there.
MR. G.A. FULLERTON'S PRESENTATION	Mr. G.A. Fullerton made a presentation, reviewing the situation as observed from a field point of view.  A copy of Mr. Fullerton's presentation is attached with pertinent information to each vu-graph.
VG - 1	<u>OBJECTIVES OF THE GAS ARCTIC STUDY GROUP</u>  Specific reference was made to the Key words "MAXIMIZED" and "PROFITABLE" on objective 1. An optimum 75% Market Share was identified. Rational based on I.O.L.'s Facilities, Expertise and Experience in the N.W.T.
VG - 2	<u>INFORMATION REQUIRED RE VOLUME</u>  I.O.L. and Competitive information required for supply capability, and agency and transportation facilities.
VG - 3	<u>DISTILLATE SALES 1980</u>  Total distillate volumes in 1980 were defined by Base Load, Gas Arctic - Most Probable, and Ancillary Volume. Discussion was generated over the delta in Gas Arctic's estimated requirements of <u>140</u> MG submitted to the N.E.B. and the <u>240</u> MG they advised Imperial Oil Ltd. The total distillate estimate of 116 MG was defined as the 100% supply case. Mr. Fullerton indicated the 100% supply case should be used for Logistics and Transportation work-up and delays should not be made pending clarification of precise estimates due to the lack of accuracy of other volumes and Gas Arctic requirements.

*See K.M. Hubley*



SUBJECT	MINUTES
VG - 4	GAS ARCTIC - FACILITIES AND SERVICE REQUIREMENTS - PETROLEUM SUPPLY
VG - 5	<p>The three alternatives Gas Arctic has, aside from the refinery were outlined and discussed. Mr. Fullerton presented the the Prairie recommendation of managing the supply system down to the barges. The rationale was based on I.O.L. expertise and experience in this area. Managing the supply to barges and base camps was identified as being more difficult, as the petroleum requirements form only a part of the integrated supply network. Prairie strategy would be to encourage CAGSL to buy F.O.B. refinery, and quote separate for facilities</p>
VG - 6	<p>The Advantages of Managing Supply system were outlined and reviewed.</p>
VG - 7	
VG - 8	<p>The Information Required for Supply System Bid was identified and reviewed.</p>
VG - 9	<p>The Gas Arctic Lubricant Expertise Requirements were outlined. Specialty products volumes of 1,697MG were identified for peak year 1980. Mr. Fullerton reviewed the Lubricant Expertise offer and its advantages to I.O.L. and Gas Arctic. A schedule of consulting fees were discussed, however the desire to maximize profit is outweighed by the market intelligence possibilities. Mr. Fullerton requested confirmation to proceed with this proposal by November 15/76. Mr. Bedard indicated there could be <u>no</u> problem in this regard.</p>
VG - 10	
VG - 11	
VG - 12	<p>Considerable discussion was generated over the type of proposal to be made to CAGSL and the timing. Mr. Fullerton requested directional approval to proceed with a conceptual service level offer by December 1, 1976.</p>
	<p>Mr. J.R. Murdock reviewed the Western Arctic Distribution Study and requested additional time to evaluate the various options, the risks, the results required etc. and indicated a size up of the various implications could be available by the end of the year.</p>
	<p>Mr. J.M. Bedard indicated that any proposal would require approval of P.P.M.G. and hence should be more explicit as to scope and details.</p>
	<p>It was decided that Mr. Fullerton and Mr. Murdock would meet in Edmonton on October 26 and arrive at a mutually agreeable approach prior to the next meeting.</p>
	<p>The next meeting was scheduled for 9:00, November 10, 1976.</p>
	<p>Meeting adjourned.</p>
cc:	<p>Mr. R.S. Grout           Mr. R.F. Roblin          Mr. R.E. Griffiths          Mr. D.B. Burnett - Edmonton</p>

*Room 1411G*



VG-1 NOTES

OBJECTIVE OF GAS ARCTIC

STUDY GROUP

1. MAXIMIZE I.O.L. PROFITABLE VOLUME PARTICIPATION
2. OPTIMIZE I.O.L. PROFIT ASIDE FROM PETROLEUM REVENUE

VG-1  
OCTOBER/76



VG- 1 NOTES

(1) 75% OF N.W.T. VOLUME  
30% OF SOUTHERN

- WHY SUCH A LARGE SHARE OF VOLUME?

MAJOR MARKETER

MAJOR REFINER

MAJOR PARTICIPANT

PROTECT EXISTING MARKET SHARE IN N.W.T.

- TYPE OF OPPORTUNITY - TRADING ON I.O.L.'S

- FACILITIES - HAY RIVER, FORT SIMPSON, STRATHCONA, NORMAN WELLS,  
YELLOWKNIFE, INUVIK, RAIL CARS, TRUCKS, ETC.

- EXPERTISE - 30 YEARS SUPPLY

- EXPERIENCE - EXPERIENCED AGENTS, YELLOWKNIFE, HAY RIVER,  
NORMAN WELLS, INUVIK

VG-2

OCTOBER/76



INFORMATION REQUIRED

RE VOLUME

1. VOLUME DEMAND BY PRODUCT BY YEAR
2. I.O.L. SUPPLY CAPABILITY BY YEAR
3. COMPETITIVE SUPPLY CAPABILITY
4. GAS ARCTIC POLITICAL CONSTRAINTS

VG-2

OCTOBER/76



VG-2 - NOTES

1. REFINERY SUPPLY CAPABILITY
2. NORMAN WELLS SUPPLY CAPABILITY
3. AGENCY'S SUPPLY CAPABILITY, INCLUDING TANKAGE, PUMPING, BARGE,  
RAIL, AND TANK CAR FACILITIES, ETC.  
SAME AS ABOVE BY COMPETITION.

PRECISENESS NOT ESSENTIAL - - NEXT VU-GRAPH.

VG-3  
OCT. /76



DISTILLATE SALES 1980

100% GAS ARCTIC SUPPLY (200MMG)

			<u>MMG</u>	
BASE LOAD - N.W.T. VOLUME	52	33	35	37
GAS ARCTIC - MOST PROBABLE	140-240	43	63	72
ANCILLARY VOLUME	103	16	18.	20
			<hr/>	
TOTAL DISTILLATE		82	116	129

VG-3  
OCT./76



1.0.1. A.M.T. 1980-81

1980-81

	<u>BASE</u>	<u>ANCILLARY</u>	<u>PIPELINE</u>	
PROPANE			2.910	2.910
WATER	44	10		54
AGAS	1.925	1.130	1.470	4.525
TURBO	8.442	4.840 $\pm 5\%$	33	13.315
TEAS	5.015	5.000	8.800	18.815
DISTILLATE	35.134	18.2 140-240	43	115.72
HEAVY	8.670	$\pm 10\%$	16	20
SPECIALTIES	552	95	<u>1.050</u>	<u>1.697</u>
			92	129
TOTAL	99.852	29.335	76.850	116.537

VG-3A



# I.O.L. N.W.T. FORECASTS

1980 (MG)

	<u>BASE</u>	+	<u>ANCILLARY</u>	+	<u>PIPELINE</u>	=	<u>TOTAL</u>
PROPANE					2,910		2,910
NAPHTHA	44		10		-		54
AVGAS	1,975		1,130		1,470		4,575
TURBO	8,442		4,840		-		13,282
MOGAS	5,015		5,000		8,860		18,875
DISTILLATE	35,134		18,260		62,560		115,954
HEAVY	8,670		-		-		8,670
SPECIALTIES	<u>552</u>		<u>95</u>		<u>1,050</u>		<u>1,697</u>
TOTAL	59,852		29,335		76,850		116,017 ?

VG-3  
OCT./76



VG-3 - NOTES

PRECISENESS OF GAS ARCTIC DEMAND IMMATERIAL - BECAUSE

- (A) LACK OF ACCURACY OF OTHER VOLUMES
- (B) LACK OF ACCURACY OF GAS ARCTIC
- (C) PERMUTATIONS OF GAS ARCTIC MAXIMUM EFFECT? % ? VOL.

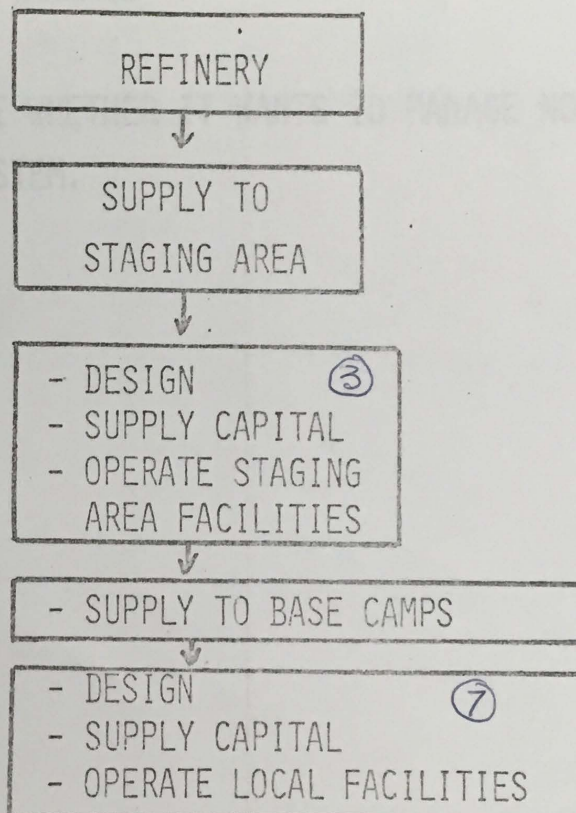


GAS ARCTIC

FACILITIES AND SERVICE

REQUIREMENTS

PETROLEUM SUPPLY





VG-4 - NOTES

ASIDE FROM THE REFINERY, GAS ARCTIC HAS THREE ALTERNATIVES

1. HANDLE ALL REQUIREMENTS THEMSELVES
2. MAKE IT PART OF OIL COMPANY TENDER
3. HAVE 3RD PARTY MANAGE

I.O.L. MUST DECIDE WHETHER IT WANTS TO MANAGE NONE, ALL OR PART OF SUPPLY SYSTEM.



PRAIRIE RECOMMENDATION

I.O.L. SUBMIT TWO BIDS

- (A) PRODUCT F.O.B. REFINERY
- (B) MANAGE SUPPLY SYSTEM TO BARGES

VG-5  
OCT./76



## ADVANTAGES OF MANAGING SUPPLY SYSTEM

### GAS ARCTIC

- 0 PURCHASE OF EXISTING EXPERTISE (ENVIRONMENT, DESIGN, CO-ORDINATION)
- 0 AMOUNTS TO CONTRACTING OUT THIS PORTION OF THE PROJECT
- 0 STAFF REDUCTION
- 0 POTENTIAL CAPITAL REDUCTION - FEWER NON-REUSABLE FACILITIES
- 0 SHARED RISK

### IMPERIAL

- 0 CONTRACT SERVICES AT A PROFIT
- 0 IN-HOUSE EXPERTISE IS AVAILABLE
- 0 INTIMATE KNOWLEDGE GAINED OF PROJECT DETAILS
- 0 GAIN COMPETITIVE INSIGHT
- 0 FACILITIES PROVIDED FOR GAS ARCTIC MAY HAVE FUTURE USE

VG-6

OCT./76



INFORMATION REQUIRED

SUPPLY SYSTEM MANAGEMENT

PROS

CONS

1. GAS ARCTIC AGREEMENT IN PRINCIPLE

2. SUPPLY/DEMAND

0 SUPPLY TO STAGING  
AREAS AND TERMINALS

- OPTIMIZE RAIL CAR & TRUCK USAGE
- SCHEDULED LOADERS TO OPTIMIZE  
RACK CAPABILITY
- CHARGE FOR SERVICE

- MANPOWER COMMITMENT
- COMPLEXITY
- COMPETITIVE INTERFACE

4. KNOWLEDGE OF CO

5. SCOPE OF EXTRA FACILITIES INVOLVED - TANKS, TANK CARS, TRUCKS

0 DESIGN, CONSTRUCT AND  
OPERATE STAGING  
FACILITIES

- USE FACILITIES FOR FUTURE  
REQUIREMENTS
- PAID FOR BY GAS ARCTIC THRUPUT

- MANPOWER
- CAPITAL REQUIREMENTS
- ENVIRONMENTAL

VG-7  
OCT./76

VG-8  
OCT./76



INFORMATION REQUIRED  
FOR SUPPLY SYSTEM BID

1. GAS ARCTIC AGREEMENT IN PRINCIPLE
2. SUPPLY/DEMAND
3. KNOWLEDGE OF GAS ARCTIC SUPPLY POLICY
4. KNOWLEDGE OF COMPETITIVE SUPPLY FACILITIES
5. SCOPE OF EXTRA FACILITIES INVOLVED - TANKS, TANK CARS, TRUCKS
6. LEGAL IMPLICATIONS RE USING COMPETITIVE FACILITIES
7. METHOD OF CHARGING FOR SERVICES

VG-8  
OCT./76



# GAS ARCTIC LUBRICANT EXPERTISE REQUIREMENTS

ESTABLISH DEMAND



SPECIFICATIONS FOR  
QUOTATIONS



PRODUCT/APPLICATION  
TRAINING



SUPPLY CO-ORDINATION



ADVANTAGES - LUBRICANT EXPERTISE OFFER

GAS ARCTIC

- PROVIDE MANPOWER & EXPERTISE WHICH DOES NOT CURRENTLY EXIST
- OTHERS AS IN SUPPLY MANAGEMENT

IMPERIAL

- IMMEDIATE OPPORTUNITY TO GET MORE PROJECT DETAILS
- ENSURES ACCURATE PRODUCT COMPARISONS
- OTHERS AS IN SUPPLY MANAGEMENT

VG-10  
OCT./76



PRAIRIE REGION RECOMMENDATION

*Subsidiary?*

1. OFFER TO WORK OUT DEMAND NOMINAL COST
2. OFFER BY NOVEMBER 15, 1976
3. BASED ON DEMAND EXPERTISE EXPERIENCE, OFFER BALANCE OF EXPERTISE REQUIRED
4. SEPARATE FROM SUPPLY BID

VG-11  
OCT./76



VG-11 - NOTES

- (A) THIS OFFER AT NOMINAL PRICE GIVES US REAL INSIGHTS  
INTO FRAMING UP SUPPLY MANAGEMENT BID.
- (B) EXPERIENCE INVALUABLE FOR FUTURE.



## S U M M A R Y

### RECOMMENDATION

- APPOINTMENT FULL-TIME CO-ORDINATOR
- ESTABLISH I.O.L. AND COMPETITIVE  
SUPPLY CAPABILITY
- APPROVE SUPPLY MANAGEMENT FOR GAS ARCTIC
- ESTABLISH COST FORMULA SUPPLY MANAGEMENT
- APPROVE LUBRICANT DEMAND OFFER AND CHARGES

### TIMING

IMMEDIATELY

DECEMBER 31/76

DECEMBER 1/76

DECEMBER 31/76

NOVEMBER 15/76

VG-12  
OCT./76